DOCUMENT RESUME

ED 109 822 EA 007 410

AUTHOR	Gess, Diane; And Others
TITLE	The Implementation of a District-Wide Evaluation Model.
PUB DATE	Oct 74
NOTE	212p.; Submitted in partial fulfillment of requirements for Doctor of Education, Nova University (Florida); Appendix A of the original document is copyrighted and therefore not available; it is not included in the pagination. Best copy available
EDRS PRICE	MF-$0.76 HC-$10.78 PLUS POSTAGE
DESCRIPTORS	Change Strategies; Data Collection; *Educational Assessment; Educational Planning; Elementary Secondary Education; *Evaluation Methods; *Evaluation Needs; Management Systems; *Models; Organizational Change; Practicums; *Program Development; Program Evaluation
IDENTIFIERS	*New Rochelle Evaluation Model

ABSTRACT

This publication describes a practicum project that developed a comprehensive educational evaluation system for collecting, storing, and displaying pertinent data for use in planning educational programs at both the district and school level in the City School District of New Rochelle. The resulting New Rochelle Evaluation Model was developed from Stufflebeam's CIPP model, incorporating aspects of Provus' Discrepancy model and data collection methods emphasized by Stake. The model has been used on a districtwide level to evaluate all programs for students with special needs and has also been used to evaluate the reading programs in two elementary schools. Sample data collection forms and a users' guide to the New Rochelle Evaluation Model are included in the appendix. (Author/JG)

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THE IMPLEMENTATION OF A DISTRICT-WIDE EVALUATION MODEL

by

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Submitted in partial fulfillment of the
requirements for the Degree of
Doctor of Education
Nova University

EA 007 410

New Rochelle Cluster
Dr. Robert R. Spillane, Coordinator

Maxi I Practicum
October, 1974

ABSTRACT

The City School District of New Rochelle, the Pennington Elementary School, Mount Vernon and the Hillcrest Elementary School, Spring Valley shared a common need for more effective evaluation. The practicum participants, all employed in the districts mentioned, set out to fill this need by developing and implementing a workable evaluation model.

The evaluation model adopted by the practicum participants was developed out of Stufflebeam's CIPP model and incorporated aspects of Provus' Discrepancy model and data collection methods emphasized by Stake.

The resulting New Rochelle Evaluation Model has been implemented on a district-wide level in the City School District of New Rochelle, and on a building level in the Hillcrest Elementary School, Spring Valley, and the Pennington Elementary School, Mount Vernon. The district-wide evaluation focused on all programs for students with special needs, while the building level evaluation focused on reading programs.

The participants believe that the model they have developed will assist in their school's and district's making more effective educational decisions.

ACKNOWLEDGMENTS

We are indebted to a number of people and organizations for their assistance in developing strategies and materials for this Practicum. Specifically, we owe thanks to:

Dr. Daniel Stufflebeam for providing us with consultation time and suggestions for resources. It is due to his leadership during our Evaluation Module that we saw the need for developing a Model (district-wide).

Dr. Robert Stake, who provided time for us at the 1974 AERA Convention and then followed through with suggestions and materials.

Drs. Malcom Provus, Daniel Stufflebeam, Blaine Worthen, Michael Scriven for allowing us to excerpt or alter for inclusion segments of their work.

J. P. Hegarty, Division of Evaluation, Texas Education Agency; Jerry R. Baker, Department of Evaluation, Saginaw, Michigan; R. W. Faunce, Department of Research and Evaluation, Minneapolis, Minnesota; James N. Jacobi, Assistant Superintendent, Cincinnati Public Schools; Nolan Estes, Superintendent of Schools, Dallas Independent School District; Larry J. Weber, Associate Professor, Virginia Polytechnic Institute and State University; Frank L. Viceno, Mesa Public Schools, Mesa, Arizona for sharing with us models or instruments from their school districts.

Dr. Freda M. Hally of the Austin, Texas Independent School District; E. Joseph Schneider of the Council for Educational Development and Research; Dr. Sarah M. Denham of the University of Arizona Medical Center; Everett Daniel of the Louisville, Kentucky Public Schools; William J. Gephart of Phi Delta Kappan magazine; Michael H. Kean, Philadelphia, Pennsylvania School System; Raymond Davis, Rhode Island State Department of Education for responding promptly and extensively to our probings and questions.

Dr. Robert R. Spillane, Superintendent of Schools, New Rochelle, N.Y.; Dr. William Prattella, Superintendent of Schools, Mount Vernon, N.Y.; Dr. R. McMillen, Principal, Spring Valley, N.Y. for their time, commitment, and financial support of the development of the New Rochelle Evaluation Model.

The staff members of the three school districts who have participated in the training workshops, and those who participated in the initial implementation.

A special debt of gratitude to Mr. S. O. Kaylin and Nova University, Fort Lauderdale, Florida, for providing professional contacts, support and direction.

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CHAPTER I

INTRODUCTION:

AN ANALYSIS OF THE SUBJECT DISTRICT'S CHARACTERISTICS

The City of New Rochelle, located in lower Westchester County, New York, is a suburb of 75,385 residents seventeen miles from the heart of New York City. The socio-economic status of the population ranges from the high and upper middle class to an ever-increasing number of low income families, many of whom are the working poor or are welfare recipients. According to most recent Title I figures, there are 1,214 AFDC children living in the city, 198 foster children, and four of the city's ten elementary schools have a poverty-eligible enrollment of 30%.[1]

The community is a microcosm of the greater New York metropolitan area. The public schools' 11,681 students reflect the ethnic and socio-economic diversity of the city. There is a sizable black minority (10,854), a large Italian community, and a growing number of students entering the school system to whom English is a second language. (The primary language of this sub-group is usually Italian but there is a developing Spanish speaking minority also.)

The New Rochelle School District is coterminous with the City of New Rochelle and consists of one comprehensive high school, two junior high schools, ten elementary schools and one learning center. Fourteen private and parochial schools enroll approximately 3,200 students.

A Federal Court decree in 1961 ordered the New Rochelle Board of Education to develop a desegregation plan for the predominantly black Lincoln Elementary School. The Board's plan allowed parents of the Lincoln students to transfer their children to other schools in the city, with the stipulations that the transfer of children would not cause class sizes to exceed the existing class size averages in the rest of the city's schools, and that the ethnic balance in the receiving school would not exceed 50% black. In September 1961 approximately half the Lincoln student population was transferred to other elementary schools. During 1962, the Lincoln School remained open but with only half its original student body. By 1963 the District closed the school entirely with all the remaining students having been transferred to New Rochelle's then eleven other elementary schools. At this same time, the Board then provided transportation for all the Lincoln students living from 1-1/2 to 10 miles from their new school. Previously Lincoln parents had contracted directly for their own transportation.

Today New Rochelle remains in compliance with the court order, with the elementary schools' black population ranging from 14 to 49 percent. Students from the former Lincoln School area continue to be bussed into schools which serve basically white residential areas. But, while the school system is "desegregated" in terms of court order under which it operates, this is accomplished by bussing children of whom the overwhelming majority are black and from low income families into schools whose population is overwhelmingly white and well-to-do middle class. Because of inadequate resources and the shortcomings of traditional evaluation techniques, the district has been unable effectively to evaluate the impact of these forces on the academic achievement, emotional growth and racial attitudes of its students. Nor has the district been able to determine the effect of teacher and community attitudes on the achievement of its students.

Events surrounding the closing of Lincoln School and movements in education on a local, state and national level served to focus attention on the fact that the schools had not been successful in providing many of their students with basic and essential skills. In spite of the best efforts of a dedicated and knowledgeable staff and the expenditure of considerable state and federal funds on special projects throughout these last years, it cannot be said that the district's basic goal of "having every child acquire those basic skills which enable him to make the further educational choices which will best fulfill his desires and his abilities" has been achieved. At this time tests show that 24% of the school population is performing below minimum competency levels in reading and 35% below that level in math. There is considerable parental dissatisfaction and disillusionment with present school performance, evidenced in part by the considerable number of children who attend private or parochial schools. Many of those parents who do have a choice of schools opt for the non-public schools.

Within the public schools there seems to be a range in the results produced by exposure to New Rochelle's educational program. In the spring of 1971, "The New Rochelle School Profile: A Report of the New Rochelle Public Schools to the Community" was published (Appendix A). Perhaps the most salient fact about the elementary schools that came to public attention as a result of this study was the range of difference shown from one school to another when one looks at any of the recorded achievement scores. One school recorded five percent of its 6th grade "below minimum competency" in reading; another school fifty percent. These problems, common to almost all urban systems, persist even though the district now draws funds from many state and federal agencies including ESEA Title I, Title II, Title III, Title IV, Aid to Urban Education, ESAA Manpower Training, Educational Professional Development Act, Pre-Kindergarten, and NDEA III. Last year well over $1,000,000 came into the district in categorical funding from these and other sources.

In addition, the district has developed a variety of curricula and instructional innovations including an extensive district-wide open education program at the elementary level, Mid-Start programs for junior high schools, a Mini-Course program at the high school as well as one modeled after the Philadelphia Parkway Program. Also changes have occurred at the classroom level with the movement of a large number of teachers towards individualization of instruction, personalized learning, differentiated staffing and teaming, IPI, Modular Scheduling, etc. But again, at least in part because of a lack of effective evaluation procedures, little is certain about the effect of these programs on each student, his achievement or affective development. And, too, the administrative decision-making effectiveness is severely hampered by a lack of pertinent information on students, programs and curricula.

New Rochelle is not substantially different from thousands of other city and suburban public school systems in that the rising cost of operation has placed an unbearable burden on its local property taxpayers. But it is different in one potentially destructive way: while most of the others have the latitude, however burdensome, to increase local revenues by raising taxes, New Rochelle is blocked from that option by the Constitution of the State of New York. It has reached the 2.0 percent tax limit imposed by Article VIII, Section 10 (c) on any school district which is coterminous with, partly within or wholly within a city having less than 125,000 inhabitants.

In the past, to reach the education objectives of the community, the people have voted to increase their contribution, through taxes, to the operation of the schools, and in recent years have authorized increases in the tax limit from 1.25 to 2.0 percent. Now, because of the Constitutional impediment just mentioned, that way to better or more varied programs is closed to them. Ironically, although the community has demonstrated its powerful support for excellence in its schools over the years, the flexibility to determine its future academic destiny has been seriously diminished. Forced to deliver mandated services and to meet State-ordered requirements in staff negotiations, course offerings, etc., the district has exhausted its available local resources. These financial constraints have imposed upon New Rochelle the need to rethink and redesign many aspects of its school program.

In 1971, for instance, the district was faced with a budgetary deficit of $1.2 million dollars. The alternatives were limited. The district could have adopted the usual standard measures of cutting costs by increasing class size, cutting all specialists, dropping or trimming programs, cutting service, supplies, etc. Instead, the district decided to use its fiscal problem as an opportunity to redesign education in the district with two clear criteria in mind:

1. to stay within budget limitation;
2. to provide a better program for children than had been provided previously by refining instructional delivery systems.

Of course, the New Rochelle redesign had to involve parents, teachers and community. The citizens of New Rochelle had to see the impending cutbacks as providing a starting point, a base for improvement rather than an attack on the schools. To effect this change the superintendent obtained a small grant from the Rockefeller Foundation to plan and carry out citizen participation in the redesign process by holding a series of conferences in the schools where teachers, parents, students and citizens could identify for themselves the problems faced by the district and the objectives of the district's educational system. Fifty-eight problem areas were identified by the group.[2] Then the committee identified 23 objectives.[3] They then proceeded to analyze several of the objectives in detail and to suggest means for their achievement.

THE NEED FOR A DEPENDABLE EVALUATION SYSTEM

These sessions clearly revealed the community's desire for more information about their schools. All agreed that desegregation, altered social attitudes and shrinking financial resources would inevitably continue to produce changes. If these changes were indeed ineluctable, the community wanted them based upon clear, current and thorough information.

The district made great changes based in part on community input received from the Redesign conferences, including implementation of a district-wide reading program (MARK) which utilized reading specialists for training teachers, provided a full time language arts teacher for each school, developed self-help reading laboratories, established an Educational Learning Center to provide intensive reading instruction for children with educational disabilities, Educational Support teams, working in the schools and at the Center, and Block and Mini grants for schools and individual teachers.[4]

But after having accomplished these dramatic changes, straitened resources and inadequate evaluation instruments and procedures, made the district unable to measure adequately the effect of the new Redesign program or to identify its weaknesses, strengths, or components needing further research and development.

One year after Redesign the district once again faced a budget deficit. Once again they sought from the community, through a series of hearings, suggestions about what kind of economies and program reforms the public would support. Once again the repeated advice of residents, teachers and parents called for the superintendent to make the necessary decisions, but to make them not based on political appeal, or professional intuition but rather based upon hard objective data. It became evident again that the district needed an evaluation-information system that would provide the information needed by the district administration to make crucial decisions affecting particular educational programs, staffing patterns and levels of pupil achievement.

The participants in this Maxi practicum, five of whom hold administrative positions in the City School District of New Rochelle, settled upon this need to develop a system which would provide information necessary to decision-making as a project worthwhile in its benefit both to the district and to themselves. They sought the approval of the district's superintendent and, securing it, proceeded to work in developing the desired system.

The first step was to find out as much about the district and the origins of its present difficulties as possible. Much of the foregoing in this introduction is the product of that effort in historical research. Next came an analysis of current attitudes and perceptions.

In April 1972 New Rochelle participated in a district-wide needs assessment in conjunction with Battelle Institution of Columbus, Ohio. The Needs Assessment Survey[5] identified areas of concern as perceived by different segments of the community. In developing the Needs Listing the Battelle staff defined as a "need" any item with an index of 1.0 or higher. The index is the difference between the mean scores under (a) "desired" and (b) "actual" for each question. Any item with an index of 1.5 or higher they considered a "critical need."[6]

In the Battelle Survey students seemed most concerned about the difficulty in expressing their ideas to school administrators and the Board. They were concerned too with the need for certain course offerings at all three levels and with the degree to which staff members help each student become an effective human being. They expressed the desire to have a stronger voice in the formulation of school rules and regulations and more freedom in the various student media. They also saw a need for student self-evaluation and a method to do so.

Teachers were most concerned about the area of evaluation both as a means for the improvement of the educational program and as it might lead to recognition of and reward for superior performance. Another area of teacher concern was the need for programs that would prevent learning disabilities from developing and that would deal with them at the point of initial diagnosis. Teachers saw the need for effective planning in their courses and in the district's total program. They spoke in favor of training programs in educational planning for board members and in the development of a worthwhile orientation program for new teachers. They also sought participation in the development of the school budget.

The community and parents also expressed concern in the area of evaluation as it regarded board and administrator accountability. They were concerned with improving auxiliary services, sought improvement in pupil guidance, and in extra-curricular activities. Community members sought greater individualization of instruction and more effective communication about board and school activities.

Administrators spoke out clearly in favor of effective in-service training programs for administrators (and for the encouragement and resources to participate). They saw need for a comprehensive and in-depth orientation program for board members. They indicated a need for systematic (cost/effective) evaluation of the educational program, use of results to improve the educational program, and use of follow-up information obtained from graduates.

In summary the Battelle findings confirmed repeated earlier indications: there is high degree of concern and agreement among all groups for educational planning and evaluation.

Redesign, budget hearings, the Battelle program - each time the public or the staff had an opportunity to express its perception of the district's needs - the same need was named: the need for a more complete system of collecting relevant information and of presenting it in such a way that it would be useful in the making of decisions. And that is what we, the Maxi participants, set out to provide: a comprehensive system for collecting, storing and displaying pertinent data, a system that would provide the means to make the myriad decisions required of a school system in the current era, a total educational evaluation system.

The components for such a comprehensive evaluation system, we speculated, might include:

1. ACHIEVEMENT MONITORING DATA: Information to teachers on student achievement of specified learning objectives;
2. NEEDS ASSESSMENT DATA: Information from teachers, parents and students, concerning the needs for achieving priority goals;
3. TEACHER EVALUATION DATA: Administrator and students' subjective perceptions of teacher effectiveness;
4. ADMINISTRATOR EVALUATION DATA: Teachers' and students' subjective perceptions of administrator effectiveness;
5. ATTITUDE MONITORING DATA: Information on teacher, parent, student, and relevant other attitudes toward school and the school environment;
6. GOAL SETTING DATA: Information to administrators from parents, teachers, and students, concerning what the priority goals for the school district should be;
7. PROGRAM MONITORING DATA: Information relating to the cost, conduct and effectiveness of programs, individually and in related combinations;
8. PROGRAM PLANNING DATA: Projections of the social, demographic, economic, and educational forces operating in the district.

The participants in this practicum are convinced that the need for a comprehensive system of evaluation in the City School District of New Rochelle can convincingly be demonstrated. Given the proximity of the subject district to

New York City, given its size, racial and socio-economic composition, its financial status, the fluid, emergent nature of its programs, the changing expectations of its public and the incredibly rapid technological and philosophical revolutions in the field of education, this district (and, we would posit, most others as well) needs a system for collecting, for storing and for retrieving useful information about itself so that intelligent, informed decisions can be made relating to retaining, modifying or terminating components of the district's total operation.

CHAPTER II

PROCEDURES AND PRACTICUM PARTICIPANTS' TASKS

The order in which this Practicum was carried out was as follows:

Step I.

A statement of need was developed by Mr. Olcott. This consisted of an analysis of the City School District's characteristics, its needs in terms of data for decision-making, and the purposes to be served by the installation of a district-wide evaluation model.

Step II.

Each practicum participant fully investigated and prepared a description of an available evaluation model.

a. Mr. Isidori and Mr. Zucker dealt with Stufflebeam's CIPP Model.

b. Mr. Pozzi dealt with the Stake Model.

c. Mrs. Gray dealt with the Provus Evaluation Model.

d. Mrs. Gess dealt with the Scriven Evaluation Model.

e. Mr. Olcott and Mr. Samuels explored lesser-known evaluation models mentioned in the literature including those of Hammond, Tyler, Metfessel-Michaels and others.

Step III.

The practicum participants then developed the pro and con aspects of the model they investigated. They recommended those aspects of their model that were applicable and feasible in the subject district.

Step IV.

All practicum participants, by using the results of their model analyses and materials from other districts, conducted joint brain-storming and think-tank sessions. Through these sessions the practicum participants developed an evaluation model suited to the subject school situation.

Step V.

Each practicum participant developed training materials which related to the model that he studied but which would have application in the new model.

Step VI.

The practicum participants, as a group, developed a training program for various levels of school personnel within the district.

Step VII.

These training programs were conducted for school building staff, school administrative staff, district administrative staff and special services staff according to the following schedule:

a. Mr. Zucker conducted in-service training for all teaching staff within his elementary school building in the City School District of Mount Vernon.

b. Mrs. Gess conducted in-service training for all teaching staff within her elementary building in Spring Valley.

c. Mrs. Gray conducted training sessions for department chairmen in her junior high school in the City School District of New Rochelle.

d. Mr. Pozzi conducted training sessions for elementary principals in the City School District of New Rochelle.

e. Mr. Samuels conducted training sessions for secondary principals and Mr. Olcott for district-wide administrators including the superintendent and his cabinet.

f. Mr. Isidori conducted training sessions for special service personnel.

Step VIII.

Practicum participants, concurrently with the training sessions incorporating suggestions made by the trainees themselves concerning their emerging new roles, developed new role descriptions and functions for present staff.

Step IX.

Practicum participants provided additional training sessions for key personnel, in their new evaluation roles.

Step X.

Practicum participants developed guide books which contained procedures and forms necessary to conduct an evaluation of any type or level by teachers, administration or community.

Step XI.

Items VII - X above constituted, in fact, the first steps in the direction of the implementation of an evaluation model on a district-wide basis.

Step XII.

Evaluation of a building program was implemented in an elementary school in Mount Vernon and Spring Valley using the newly developed system.

Step XIII.

Evaluation of a district-wide program operating in New Rochelle, using the newly developed system.

ROLES OF PRACTICUM PARTICIPANTS

Seymour Samuels

I coordinated all aspects of the practicum. (50 hours)

I investigated and prepared descriptions of less well known evaluation models. This investigation was done from the literature, visitations and consultants. (48 hours)

After describing these evaluation models, I prepared pro and con aspects of the models. (32 hours)

I made recommendations as to which aspects of the investigated models would be feasible and applicable to the subject school situation.

I coordinated the practicum participants in brain-storming and think-tank sessions in the creation of a new evaluation model. (30 hours)

I developed training materials that related to the models I investigated and which seemed to have application in the new model. (32 hours)

I coordinated the practicum participants, in working sessions, in the creation of a training program for various levels of school personnel, within the district. (16 hours)

I conducted training sessions for secondary school principals in the City School District of New Rochelle. (30 hours)

I coordinated the practicum participants in the development of new role descriptions and operations for present staff and personnel. (16 hours)

I coordinated the practicum participants in providing additional training sessions for key personnel in their new evaluation roles. (8 hours)

I coordinated the practicum participants in the development of evaluation guide books. (48 hours)

I coordinated the initiation of an evaluation for a district-wide program in conjunction with Pozzi, Olcott, Gray, and Isidori. (32 hours)

I coordinated the efforts of Mount Vernon and Ramapo elementary schools with Mr. Zucker and Mrs. Gess. (10 hours)

I coordinated evaluation of the practicum. (20 hours)

Richard Olcott

I developed the Needs section of the practicum. (48 hours)

I investigated and prepared descriptions of less well known evaluation models. This investigation was done from the literature, visitations and consultants. (48 hours)

After describing these evaluation models, I prepared pro and con aspects of the models. (32 hours)

I made recommendations as to which aspects of the investigated models would be feasible and applicable to the subject school situation.

I participated in brain-storming and think-tank sessions in the creation of a new evaluation model. (32 hours)

I developed training materials that related to the models I explored and which seemed to have application to the new model. (32 hours)

I participated with other practicum participants, in working sessions, in order to create a training program for various levels of school personnel within the district. (16 hours)

I conducted training sessions for the superintendent and his cabinet, in the use of the newly developed evaluation system. (30 hours)

I participated with the other practicum participants in the development of new role descriptions and operations for present staff and personnel. My major emphasis was on evaluation roles for central office staff. (16 hours)

I assisted the other practicum participants in additional training sessions for key personnel in their new evaluation roles. (8 hours)

I assisted the other practicum participants in the development of evaluation guide books. My major emphasis was guide books for central administration. (48 hours)

In conjunction with Samuels, Pozzi, Gray and Isidori, I implemented the evaluation of a district-wide program. (32 hours)

Diane Gess

I fully investigated and prepared a description of the Scriven evaluation model. This investigation was done from the literature, visitations and consultants. (48 hours)

After describing the Scriven evaluation model in detail, I prepared pro and con aspects of the model. I made recommendations as to which aspects of the Scriven model would be feasible and applicable to the subject school situation. (32 hours)

I joined with the other practicum participants in brain-storming and think-tank sessions in the creation of a new evaluation model. I represented the Scriven model as well as an elementary principal in the development of this new model. (32 hours)

I developed training materials that related to the Scriven evaluation model and which seemed to have application in the new model. (32 hours)

I participated with the other practicum participants, in working sessions, in order to create a training program for various levels of school personnel within the district. (16 hours)

I conducted training sessions in evaluation for the staff of my elementary school in Spring Valley. (30 hours)

I worked with the other practicum participants in the development of new role descriptions and operations for present staff and personnel. My major emphasis was on the evaluation role of teachers. (16 hours)

I assisted the other practicum participants in additional training sessions for key personnel in their new evaluation roles. (8 hours)

I assisted the other practicum participants in the development of evaluation guide books. My major emphasis was guide books for elementary teachers. (48 hours)

I implemented the evaluation of a program in my school building. (32 hours)

Jerrold Zucker

I fully investigated and prepared a description of the CIPP evaluation model. This investigation was done from the literature, visitations and consultants. (48 hours)

After describing the CIPP evaluation model in detail, I prepared pro and con aspects of the model. I made recommendations as to which aspects of the CIPP model would be feasible and applicable to the subject school situation. (32 hours)

I worked with the other practicum participants in brain-storming and think-tank sessions in the creation of a new evaluation model. I represented the CIPP model as well as the elementary principal in the development of this new model. (32 hours)

I developed training materials that related to the CIPP evaluation model and which seemed to have application in the new model. (32 hours)

I participated with the other practicum participants, in working sessions, in order to create a training program for various levels of school personnel within the district. (16 hours)

I conducted training sessions in evaluation for the staff of my elementary school in the City School District of Mount Vernon. (30 hours)

I participated with the other practicum participants in the development of new role descriptions and operations for present staff and personnel. My major emphasis was on evaluation roles for teachers. (16 hours)

I assisted the other practicum participants in additional training sessions for key personnel in their new evaluation roles. (8 hours)

I assisted the other practicum participants in the development of evaluation guide books. My major emphasis was guide books for elementary teachers. (48 hours)

I implemented the evaluation of a program in my school building. (32 hours)

I perceived myself as the implementator. It was my responsibility to review and implement in my school building the evaluation procedures and techniques developed by the group. The feedback of the procedures and techniques was used to increase the feasibility and practicality of the evaluation model being designed.

La Ruth Gray

I fully investigated and prepared a description of the Provus evaluation model. This investigation was done from the literature, visitations and consultants. (48 hours)

After describing the Provus evaluation model in detail, I prepared pro and con aspects of the model. I made recommendations as to which aspects of the Provus model would be feasible and applicable to the subject school situation. (32 hours)

I participated with the other practicum participants in brain-storming and think-tank sessions in the creation of a new evaluation model. I represented the Provus model as well as department chairmen in the development of this new model. (32 hours)

I developed training materials that related to the Provus evaluation model and which seemed to have application in the new model. (32 hours)

I participated with the other practicum participants, in working sessions, in order to create a training program for various levels of school personnel within the district. (16 hours)

I conducted training sessions in evaluation for department chairmen in the City School District of New Rochelle. (30 hours)

I participated with the other practicum participants in the development of new role descriptions and operations for present staff and personnel. My major emphasis was on evaluation roles for department chairmen. (16 hours)

I assisted the other practicum participants in additional training sessions for key personnel in their new evaluation roles. (8 hours)

I assisted the other practicum participants in the development of evaluation guide books. My major emphasis was guide books for department chairmen. (48 hours)

In conjunction with Samuels, Olcott, Pozzi and Isidori, I implemented the evaluation of a district-wide program. (32 hours)

I maintained a record of all our planning and working sessions (this included recording problems encountered; modifications made). Provided a basis for control by continuous monitoring (were we doing what we said we were going to do) and a basis for change by identifying our unmet needs and unused opportunities; and stored information for further use. This record served as the rough draft of this report for it chronicled our practicum activities in detail. (50 hours)

Facilities available to me for individual work included tape and tape recorder, some secretarial time, clerical materials, portable video-pak (for use during in-service training sessions), space in my office for storage. For group work, I had available transparency making devices, video tape, and hardware for in-service training.

Joseph Isidori

I fully investigated and prepared a description of the CIPP evaluation model. This investigation was done from the literature, visitations and consultants. (48 hours)

After describing the CIPP evaluation model in detail, I prepared pro and con aspects of the model. I made recommendations as to which aspects of the CIPP model would be feasible and applicable to the subject school situation. (32 hours)

I participated with the other practicum participants in brain-storming and think-tank sessions in the creation of a new evaluation model. I represented the CIPP model as well as the elementary principal in the development of this new model. (32 hours)

I developed training materials that related to the CIPP evaluation model and which seemed to have application in the new model. (32 hours)

I participated with the other practicum participants, in working sessions, in order to create a training program for various levels of school personnel within the district. (16 hours)

I conducted training sessions in evaluation for special service personnel in the City School District of New Rochelle. (30 hours)

I joined with the other practicum participants in the development of new role descriptions and operations for present staff and personnel. My major emphasis was on evaluation roles for special service personnel. (16 hours)

I assisted the other practicum participants in additional training sessions for key personnel in their new evaluation roles. (8 hours)

I assisted the other practicum participants in the development of evaluation guide books. My major emphasis was guide books for special service personnel. (48 hours)

In conjunction with Samuels, Olcott, Gray and Pozzi, I implemented the evaluation of a district-wide program. (32 hours)

John Pozzi

I fully investigated and prepared a description of the Stake evaluation model. This investigation was done from the literature, visitations and consultants. (48 hours)

After describing the Stake evaluation model in detail, I prepared pro and con aspects of the model. I made recommendations as to which aspects of the Stake model would be feasible and applicable to the subject school situation. (32 hours)

I participated with the other practicum participants in brain-storming and think-tank sessions in the creation of a new evaluation model. I represented the Stake model as well as the elementary principal in the development of this new model. (32 hours)

I developed training materials that related to the Stake evaluation model and which seemed to have application in the new model. (32 hours)

I worked with the other practicum participants, in working sessions, in order to create a training program for various levels of school personnel within the district. (16 hours)

I conducted training sessions in evaluation for 10 elementary school principals in the City School District of New Rochelle. (30 hours)

I participated with the other practicum participants in the development of new role descriptions and operations for present staff and personnel. My major emphasis was on evaluation role of principals. (16 hours)

I assisted the other practicum participants in additional training sessions for key personnel in their new evaluation roles. (8 hours)

I assisted the other practicum participants in the development of evaluation guide books. My major emphasis was guide books for elementary principals. (48 hours)

In conjunction with Samuels, Olcott, Gray and Isidori, I implemented the evaluation of a district-wide program. (32 hours)

CHAPTER III

A REVIEW OF AVAILABLE MODELS

When the participants agreed to develop, test and install an evaluation system for the City School District they made their initial work the simultaneous exploration of two questions. The first was "What kind of system does the district, given its characteristics, require?" and the second "What kinds of evaluation systems are available?" The answers to the first question have been summarized above. The answers to the second, consisting of a review of available models and an assessment of their utility in the subject district, are to be found below.

THE CIPP EVALUATION MODEL

In late 1967 and early 1968 the decision was made by the Phi Delta Kappa's Research Advisory Committee and Board of Directors to explore the area of evaluation of educational programs. This was prompted by the Elementary and Secondary Education Act of 1965 which promised to improve educational programming. However, it was apparent in 1966 and 1967 that people in the field of evaluation did not sufficiently understand the nature of program evaluation nor did they have the evaluation procedures and techniques necessary to measure the projected educational improvements. As a result the Phi Delta Kappa's Advisory Committee recommended the establishment of a national Study Committee on Evaluation which was assembled by Dr. Daniel L. Stufflebeam. The people who were on this committee came from the Evaluation Center at the Ohio State

University, the R. & D. Center on Evaluation at U.C.L.A. and EPIC, a Title III Center in Tucson, Arizona.[7] The purpose of this committee was to come up with a description of the process of evaluation regarding the conceptual and methodological needs of the field. One of the major results of this committee was the development of the CIPP Evaluation Model.

The CIPP Evaluation Model was developed to provide timely information in a systematic way for decision making which is a proactive application of evaluation. The CIPP Model also serves the retroactive purpose of providing information for accountability.

According to the CIPP Evaluation Model, evaluation is a systematic, on-going process. The process includes three basic steps: the delineating of questions to be answered and information to be obtained, the obtaining of relevant information, and the providing of information to decision makers for their use to improve ongoing programs. Finally, according to the CIPP theories, evaluation serves decision making. Four kinds of decisions are served by the CIPP Evaluation Model. Planning decisions determine objectives. Structuring decisions project procedural designs for achieving objectives. Decisions in executing chosen designs are implementing decisions, and recycling decisions determine whether to continue, terminate or make changes within the project.

The aforementioned decision types are served by four types of evaluation. Context evaluation provides information about needs, problems, and opportunities in order to identify objectives. Input evaluation provides information about the strengths and weaknesses of alternative strategies for achieving the objectives. Process evaluation provides information about the strengths and weaknesses of a strategy during implementation so that either the strategy or its implementation might be strengthened. Product evaluation provides information for determining whether objectives are being achieved and whether the procedure employed to achieve them should be continued, modified or terminated.

The CIPP Model answers four questions: What objectives should be accomplished? What procedures should be followed? Are the procedures working properly? Are the objectives being achieved?

In order to see the relative worth of this method of evaluation, especially for accountability purposes, it is necessary to describe the CIPP Evaluation Model in detail.

Definition

The definition of evaluation that most suitably conforms with the procedures and methodology of the Context, Input, Process and Product Evaluation model is:

> Evaluation is the process of delineating, obtaining and providing useful information for judging decision alternatives.[8]

The purpose of evaluation is to improve the decision making process by establishing an interface relationship between the evaluation types and the various levels of decision making.

The process of delineating, obtaining and providing is intrinsic at each level of the CIPP Evaluation Model so that useful information can be set up in an organized manner to establish weighted decision alternatives.

There are terms in the definition of evaluation that have to be explained in order to fully comprehend the workings of the CIPP Evaluation Model.

Process is a continuous and cyclical activity which subsumes many modes and steps of operations.

Delineating involves the focusing of informational requirements to be served by evaluation through specifying, defining and explicating.

Obtaining involves the collecting, organizing, analyzing and reporting of information through such means as statistics and measurement.

Providing means setting up the data collected into systems or subsystems which would best serve the needs of the evaluator and the decision maker.

Useful information requires predetermined relevance criteria established by both the evaluator and the decision maker.

Information is both the descriptive and interpretive data collected about the entities (tangible or intangible) of a program.

Judging is the assignment of weights in accordance with a specified value framework, criteria derived therefrom, and information which relates criteria to each entity being judged.

Decision alternatives are a set of optional responses to a specified question.

Decisions to be Served

The CIPP Evaluation Model advocates the use of acquired data to service decisions. There are four basic types of decisions that can be served by evaluation. These are planning decisions, structuring decisions, implementing decisions and recycling decisions.

Planning Decisions

Planning decisions pertain to the major changes that are needed in a specific program. Planning decisions are necessary when a discrepancy is noted between what a program is intended to do and what is actually happening.

Planning decisions would be concerned with such questions as: Should program cbjectives be changed? What priorities should the program serve? What are the problems which are impeding the attainment of objectives? What specific behaviors should the students exhibit after participation in the programs?

In summary, planning decisions are mainly concerned with program objectives and the obstacles that are impeding the attainment of those objectives.

Structuring Decisions

Structuring decisions determine the means that will be utilized in a program to attain the objectives. Such variables as method, content, organization, personnel, schedules, facilities, budget curricula, human and material resources, and the level of student, staff, parent involvement are all examples of structuring decisions.

Structuring decisions include action to operationalize a program. For example, the allocation of budget, the recruitment of staff and the orientation to the intents of the activity, the needed materials and facilities, assignment of responsibilities, definition of roles, motivation for staff to prepare for new activity are all necessary means for structuring a program so that objectives can be met.

Implementing Decisions

Implementing decisions are concerned with putting the resources to work. These decisions deal with the actual working through of the program (operational procedures). These decisions elicit such questions as: Should the staff be retrained? Should new procedures be instituted? Should additional resources be sought? Should responsibilities be reassigned to staff? Should the schedule be modified? Is additional inservice required? Are outside consultants necessary?

Recycling Decisions

Recycling decisions deal with the relationship between the quality of attainments and the objectives. Recycling decisions indicate whether a specific activity or program should continue, terminate, evolve or modify. These decisions involve choices of product control. These decisions are not necessarily made at the end of a cycle of a particular program. Recycling decisions are concerned with attainments at any point in a program.

Questions that illustrate what is meant by recycling decisions are: Are the students' needs being met through program implementation? Is the project failing? Are we solving intended problems? Was the project worth the money? Was the progress significant enough to continue the project? Has the project resulted in improved teacher competence?

Evaluation Types

Since evaluation and decision-making have a symbiotic relationship, there are four evaluation types that correspond to the aforementioned decision types.

Context Evaluation

Context evaluation is the most basic type of evaluation. Context evaluation provides a rationale for the setting up of objectives. Context evaluation:

1. Defines the relevant environment.
2. Describes the actual and desired conditions.
3. Identifies unmet needs and unused opportunities.
4. Diagnoses the problems that prevent needs from being met.
5. Describes the values.

The methodology of context evaluation consists of two modes:

1. The contingency mode searches for opportunities and pressures outside of the immediate system to promote improvement within.

Examples of the contingency mode of methodology would involve: study visits to other systems; exploration of the research and development literature; outside consultants; brainstorming retreats; assessments of community values, attitudes and priorities, etc.

2. The congruency mode compares actual and intended system performance. This mode is concerned with a school system's statement of goals and policies and the state's laws and policies governing education.

An essential characteristic of this mode of methodology is that it establishes baseline data about the performance of a program. Through this methodology discrepancy information can be reported to administrators so that unmet needs can be taken care of, i.e. standardized test performance, lack of educational opportunities for children from low socio-economic backgrounds, high rate of failure, negative student attitudes toward a particular area in the curriculum, evidence of narcotics, malnutrition, high dropout rate, lack of parent participation.

School systems should maintain context evaluation mechanisms that provide both congruence and contingency data.

Input Evaluation

The purpose of input evaluation is to determine what resources are necessary to accomplish program objectives. This involves the investigation of strategies and designs needed to attain the intended results.

The end product of input evaluation is an analysis of one or more procedural designs in terms of potential costs and benefits. Input evaluation would encompass the following processes:

1. Alternative designs are assessed concerning time, staffing, budget requirements.
2. Potential procedural barriers are investigated.
3. Cost of resources and strategies are studied.
4. The relevance of design to program objectives is also looked at.

Input evaluation also provides information that will determine if it is necessary to use outside help to assist in the attainment of program objectives.

Input evaluation is essentially ad hoc and microanalytic in comparison with context evaluation which is mainly systematic and macroanalytic.

The methodology of input evaluation varies with the amount of change that is necessary. For instance if the change required is large and there is little information available, then the input evaluation will be broader in scope.

Context evaluation determines the amount of change necessary and the amount of information available. If the context evaluation reveals that there is need for broad changes and the information available to make those changes is low, then the input evaluation will be quite extensive.

Input evaluation is also operative when small program changes are necessary. Process evaluation may require slight changes in the operation of the program. This may involve the investigation of additional resources to make the changes. Hence input evaluation would once again become active.

Obviously, input evaluation can be either simple or complex depending upon the change setting (homeostatic, incremental or neomobilistic).

Process Evaluation

Once objectives have been formulated based upon the context evaluation and resources are established through input evaluation for program operation, process evaluation occurs at that point when the program begins. Process evaluation provides periodic feedback to persons responsible for implementing plans and procedures.

Three Main Objectives of Process Evaluation

1. Detect or predict defects in the program design during the implementation stages.
2. Provide information for programmed decisions.
3. Maintain a record of the procedure as it occurs.

The first objective may include interpersonal relationships between the students and staff, communications, logistics, understanding of program resources and designs by staff, adequacy of resources, physical facilities, staff and time schedules.

The second objective involves projectivity and servicing pre-programmed decisions to be made by project leaders during the implementation of a program. If the input evaluation has been done properly, the evaluator should have little difficulty in delineating pre-programmed decisions.

The third objective of process evaluation is to note the main characteristics of the project design. This would include concepts to be taught and the amount of discussion to take place, and a description of what actually takes place. This information is necessary because it will be useful at later stages of the project when there is a determination of why objectives were or were not achieved.

Four essential elements of process evaluation are the provision for a full time process evaluator, instruments for describing the process, regular meetings between the process evaluator and program or project personnel, and frequent updating of the process evaluation designs. This is especially true in incremental and neomobilistic settings.

The process evaluator should meet periodically with the project decision makers, but at these meetings the operations manager should discuss the project with the other program personnel to identify concerns and issues on future project activities. While the process evaluator should remain silent and listen, he should also provide information about past operations to help identify issues concerning future operations. After the decision personnel have identified the issues and questions, the process evaluator should again provide whatever relevant information he has. During process evaluation feedback sessions, the decision makers should define the conditions of relevance for the feedback of information, and the evaluator should provide information within that framework. The evaluator should also help program personnel identify the questions which need to be answered at the next feedback sessions; he might do this by summarizing the data collection plan for the immediately intervening period and asking the decision makers if it will provide them with the information they will need.

Process Evaluation Methodology

The methodology for process evaluation consists of both informal and formal procedures - interaction analysis, open-end and end-of-the-day reaction sheets, interviews, rating scales, diaries kept by project personnel, semantic differential instruments, records of staff meetings, and suggestion boxes.

Relationship of Process Evaluation to Other Types of Evaluation

Process evaluation is a function of the extent to which context and input evaluation have been performed adequately - the more adequate the context and input evaluation, the more certain the program director can be of how well his design will operate and the less critical is the need for process evaluation.

When the rationale for the given objectives and project design is vague the project is headed for trouble and maybe failure. Therefore, the feedback through process evaluation is absolutely essential.

Product Evaluation

The fourth type of evaluation is product evaluation. Its purpose is to measure and interpret attainments not only at the end of a project cycle, but as often as necessary during the project term.

The methodology of product evaluation includes devising operational definitions of objectives, measuring criteria associated with the objectives of the activity, comparing these measurements with predetermined absolute or relative standards and making rational interpretations of the outcomes using the recorded context, input and process information.

Both context and product evaluation assess the extent to which ends are being attained. Context evaluation does this systematically with respect to a total system, and product evaluation does so with respect to change efforts within the system. Context evaluation provides the specifications in terms of which product evaluation is later carried out.

Input and product evaluations are easily distinguishable, for input evaluation occurs prior to the operationalization of a change project, and product evaluation occurs prior to the operationalization of a change project, and product evaluation occurs during and after the project. Whereas context evaluation determines the specifications for product evaluation, input evaluation provides the specifications for process evaluation. A major step within the input evaluation phase is assessing the appropriateness of alternative and product evaluation designs that could be implemented as part of a designed procedure.

Process evaluation makes it possible to determine if actual procedure is discrepant from design, and product evaluation assists in determining whether objectives are being attained. Together, both kinds of information provide a stronger rationale than either one alone to judge whether a procedure should be continued as is, modified, or completely recycled.

Strengths

It is the judgment of the participants that the CIPP Evaluation Model with modification can be installed in the subject school district. However, it is important to note the strengths and limitations of the CIPP Model.

The decision making process is central to administrative procedures. In many cases there is no systematic attempt in schools to arrive at sound decisions. Decision makers must know what alternatives are available and be capable of making sound judgments about the relative merits of the alternatives. Evaluative information is necessary because under the best of circumstances, judgmental processes are subject to human bias, prejudice and vested interests.

One of the major advantages of installing the CIPP Evaluation Model in a school district is the offsetting of capricious, biased, decision making. The CIPP Evaluation Model if properly followed will improve the quality of decisions and hence the quality of programs. The Model will serve the decision maker by identifying alternatives and by making valid and reliable information pertaining to alternatives accessible.

The different levels of evaluation and the counterpart decision types help improve the direction of the school district.

The Model is purpose-oriented. This is sound practice in administrative procedure. Each evaluation type in the CIPP Model has strategies, objectives, methodology and a relationship to decision making.

The CIPP Model provides ongoing evaluation (formative) while the program is operative. This is essential so that changes and adjustments can be made while a program is going on.

The CIPP Evaluation Model contains all of the essential characteristics of a logical structure of an evaluation design.

These are as follows:

Focusing the Evaluation

1. The major levels of decision making to be served are identified.
2. The CIPP Model allows for the projection of decision to be served.
3. The CIPP Model defines criteria for each decision situation by specifying variables for measurement and standards for use in the judgment of alternatives.
4. The CIPP Model defines the policies within which the evaluation must operate.

Collection of Information

The CIPP Model:

1. Specifies the source of the information to be collected.
2. Specifies the instruments and methods for collecting the needed information.
3. Specifies the sampling procedure to be employed.
4. Specifies the conditions and schedule for information collection.

Organization of Information

The CIPP Model specifies a format for the information to be collected and a means for coding, organizing, storing and retrieving information.

Analysis of Information

The CIPP Model specifies the analytical procedures.

Reporting of Information

The CIPP Evaluation Model defines the audiences for the evaluation reports and specifies means for providing information to the audiences.

Administration of the Evaluation

The CIPP Model:

1. Summarizes the evaluation schedule.
2. Defines staff and resource requirements and plans for meeting these requirements.
3. Specifies the means for meeting policy requirements for conduct of the evaluation.
4. Evaluates the potential of the evaluation design for providing information which is valid, reliable, credible, timely and pervasive.
5. Specifies and schedules means for periodic updating of the evaluation design.
6. Provides a budget for the total evaluation program.

Another strength of the CIPP Model is that it has built into it a method of accountability.

Accountability is established by the CIPP Evaluation Model through the following means:

1. Recording objectives and bases for choice through context evaluation.
2. Recording of chosen strategy and design and reasons for their choice through input evaluation.
3. Recording of actual processes through process evaluation.
4. Recording of attainments and recycling decisions through product evaluation.

Limitations

The CIPP Evaluation has obvious limitations that must be considered prior to the installation of such a process.

The cost for conducting this type of evaluation in a school district would be quite high, particularly if new, rather than retrained existing staff, are hired to implement it. The initial outlay by school districts for such a service, depending upon the amount of effort, could be very costly.

With modifications to serve local objectives and with a reorganization of the subject district that would make possible the employment of existing staff to conduct the evaluation, the CIPP Model could be installed in the district.

DISCREPANCY EVALUATION MODEL (DEM)

The DEM is based on the work of Malcom M. Provus, Director of the Evaluation Research Center, University of Virginia. The design defines evaluation as "the comparison of performance against a standard."[9] The model builds in at each stage performance information to compare with a prior established standard.[10] Discrepancy is ascertained by "judging the adequacy of that performance."[11]

Provus states that "both administrators and researchers/evaluators must see evaluation as a continuous management process which serves program improvement as well as program assessment purposes."[12]

The DEM relies heavily on a team approach which synergistically combines the functions of evaluation, program planning, and program operation to create one self-improving system supported by professional consultation (the program staff and manager) and technical assistance (evaluating staff and researchers) to address the multiple needs of new education programs. The model calls for continuous feedback mechanisms in meetings of the team.

The major purpose of this team then is to:

1. Insure that standards acceptable to the decision-maker have been defined.
2. Compare the practices, strategies and methods in the program that are to be evaluated against those predetermined standards.

The DEM defines evaluation as a system for comparing performance against standards. Evaluation is a construct for improving educational programs. It is used to improve programs, with teachers and staff playing a key role in its conduct.

Hence, evaluation is a decision-making process that generates standards, modifies behavior, and, in short solves problems that are subject to continuous redefinition.

The purpose of this model is to analyze the interacting parts of an educational system's performance; to provide information on program effectiveness to administrator (hereafter called decision-maker) who must make the decisions to keep, modify, or discard programs in operation. An administrator who has used the DEM suggests that the system is effective because it answers six general questions:[13]

1. Does this program fulfill an actual need?
2. Is it feasible to implement as designed?
3. Is its operation as efficient as possible?
4. Does it achieve its objectives as stated?
5. Is its cost in line with that of other similar programs?
6. And in the event of negative replies to any of these questions, can reasons for failure be assigned?

The key emphasis of this model is in identifying discrepancies between standards and performance using the team approach. The approach is a problem-solving one which consists of the following evaluation activities:

1. Carefully defining goals or purposes;
2. A basis for the selection of program;
3. A detailed description of program or plan of operation;
4. A determination that support requirements for the plan of operation actually exist (including adequately trained staff);
5. A method of monitoring the installation and operation of the program;
6. The establishment of specific criteria for determining if goals have been met; and finally,

7. A way of feeding back information about program performance to those responsible for its management so that corrective action may be taken either to redefine the program or adjust performance.

Highlighting this emphasis is the concept that "educational program will improve only if teachers, administrators, and students become involved in a comprehensive effort to review and improve their own work."[14]

Role of Evaluator in the DEM

The DEM provides for a team approach. However it designates specific activities for the program staff and the evaluation staff of the following types:

Evaluation Staff Activity	Program Staff Activity
Identify decision points in the entire evaluation process	Identify standards
Establish and maintain an apparatus whereby staff may formulate standards	Find ways in which to reformulate standards, if necessary
Ensure the adequacy of standards through the application of explicit criteria	Find ways to resolve differences in standards used by program staff
Communicate statement of standards to staff	
Identify information needed to compare performance with standards	Identify information available or attainable in order to compare performance with standards
Design a method of obtaining program information	Provide information descriptive of program performance
Report standard vs. performance discrepancy	Choose between action alternatives in regard to discrepancy
Identify decision points in the problem-solving process	Identify kind of information needed to pinpoint cause of program performance deficiency

Locate information about cause of program performance deficiency	
Identify decision points in choosing criteria to be used for selecting "possible" and "best" corrective alternatives	Detail criteria used to identify cause of discrepancy
	Identify available corrective alternatives
Locate and synthesize information as requested	
	Identify criteria underlying choice of "best" alternative
	Choose "best" alternative for corrective action

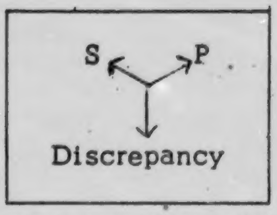
Thus illustrated, by listing the functions side by side, the interrelationship and then the activity strengthen and reinforce decision-making at all points.

Though in many school districts the evaluation staff and the program staff are one and the same, the ideal of DEM is to have the head of the evaluation team be independent of the program unit. He is viewed separately as a team member who aids program improvement and counsels administration.

The DEM assumes that the origin of standards (objectives) is derived from experience, knowledge and value. Provus sees "value as the key factor... Value determines what portions of a vast potential knowledge will be used as a standard and then confers authority upon that standard."[15] The evaluation team (evaluation staff and program staff) then agree on standards. Discrepancy evaluation suggests that the values underlying the use of a standard be made explicit (obviously they vary from school community to school community). Thus the standards for a program take on a specific form: a delineation of resources; a statement of intended outcomes; and a description of how resources will be converted into outcomes.

At its simplest level evaluation is the comparison of performance (P) against a standard (S).

Figure 1.



Evaluation is the Comparison of Standard and Performance

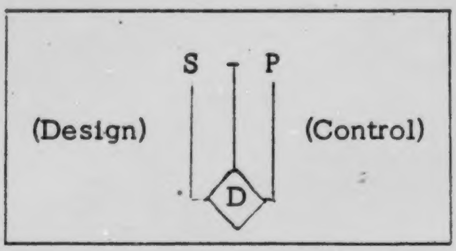
Relationship to Decision-Making:

The evaluation staff in an interrelated manner (with program staff) collects information essential to program improvement and notes discrepancies between performance and standards. Every question involves a criterion, new information, and a decision. Ongoing evaluation provides the new information. The effective evaluation plan guarantees that information provided to decision-makers is:

1. related to their priority concerns;
2. presented at an appropriate time in their planning cycle;
3. presented in a format consistent with their use of the information in decision-making.
4. fitting to the decision-maker's frame of reference.

The DEM gives the program director an opportunity to become aware of the new forces influencing the operation of the program and provides him further with a legal charge for making decisions. As a result decision-makers are forced by discrepancy information to make a choice. They must decide either to bring performance up to standard or change the standard. They must either exercise control over operation or change the plan of operation. Discrepancy evaluation serves two critical functions of management: control and design as in Figure 2 below.

Figure 2.



Discrepancy = Standard Compared to Performance

STAGES OF DISCREPANCY EVALUATION

The discrepancy model has five stages (see Figure 3 below).

The purpose of Stage I is to develop the program design. When complete the program design specifies standards for the evaluation of input, process, and output in precise terms and provides the necessary measures or instruments to assess performance relative to each standard. The program design is compared with a set of design criteria: these include statements of ultimate program goals and of the action to be taken to achieve these goals. Other design criteria are internal consistency of the program design, compatibility of the program with other activities in the system, and comprehensiveness of the design.

Once a design has been derived from program staff, activity moves toward making the Stage I comparison. The program design is assessed for comprehensiveness, internal consistency, and compatibility. In assessing the adequacy of program design, two basic questions relative to the criterion of comprehensiveness are asked: (1) Is there specific and complete information for each element of the program design, and (2) Is the information in usable form? In checking program compatibility, you want to know whether the program conflicts in any way with any other programs in the entire school system.

Stage II compares the actual inputs and processes of the program with the program design.

Data is collected by the evaluator on the inputs to verify that selection criteria, staff requirements, and organizational support conditions are being met. Discrepancies will be reported to the program staff and may result in changes in the program or changes in the design.

Data is collected on each process specified in the program design to verify its presence in the program. At this stage, more concrete standards are developed for program staff performance.

The result of this stage will be one or more reports to the program staff comparing in detail each performance variable with its standard and reporting any discrepancies that are discovered. The basic purpose is to verify that the program has been implemented in accordance with the program design.

Stage III evaluation provides program staff with an estimate of the effect of the process elements on the output elements as a function of time. For this, continuous measurements must be taken. In Stage III, the initial effects of partial treatment are evaluated by analysis of interim data. The evaluation staff should collect data describing the extent to which student behavior is changing as predicted. As a consequence of this stage of evaluation, the program staff learns whether or not the intermediate program objectives are being realized on target dates, and if not, why not.

Stage IV calls for the types of designs we have long employed in educational research. At this stage, many of the relationships between treatment conditions and effects discovered in Stage III can be properly expressed as independent variables in the experimental design stage.

The objective of Stage V is to determine the most effective allocation of resources. Cost-benefit analysis is the ultimate rational step in the process of program development and assessment put forth in the discrepancy model.

Using the five stages of evaluation, those responsible for a program can make an early and reasonably accurate prediction of its success or failure. In Stage I, if agreement about the nature and purpose of a program cannot be reached, it is unlikely that the program will be successful. At Stage II, if essential resources cannot be obtained, nor adequate substitutes found, it would be foolish to continue. At Stage III, if critical processes, such as student-teacher interactions or stimulus-response connections, do not function as expected, they must be reviewed and modified until those transactions essential to outcomes are achieved. It is not necessary for decision-makers to wait until Stage IV or V (product assessment or cost benefit analysis) is completed before judging a program. Inefficient programs that cannot develop from one stage to another despite the commitment of increased resources, be these staff time and energy or real dollars, should very likely be terminated.

Figure 3.

Stages of Discrepancy Evaluation

Stages	Performance	Standard
I	Program Design Input Dimension Process Dimension Output Dimension	Design Criteria
II	Program Operation	Program Design Input Dimension Process Dimension
III	Program Interim Products	Program Design Process Dimension Output Dimension
IV	Program Terminal Products	Program Design Output Dimension
V	Program Cost	Cost of other programs with same product

The DEM provides for team involvement so that the evaluator or evaluators and the program administrator are interdependent (teamed). The evaluative process shows through an analysis of performance, discrepancies at variance with not only the standard but also with the assumptions and values that give rise to the standard. Periodic feedback provides tools for improvement and assessment.

The following analogy developed by Malcolm Provus shows the importance of the inter-relatedness or the "teaming" of evaluation and program staff:

> A man (school administrator) decides to take a trip. He first chooses California as his destination (goal). Next he must decide which of a number of alternate means of transportation to choose (selection of a program to reach the goal). His decision will be based on a number of

considerations such as time, money, etc. He decides to go by car. Before he begins driving he must plan the precise route that he will follow (plan of operation), what roads he will travel, how far he expects to go each day, etc. He will also have to engage in a number of activities to prepare for the trip, such as making sure the car has gas and oil and that all the parts are in working order. He'll also have to make sure that he has proper financial coverage (support functions) and if he is driving a standard shift car when he has always driven an automatic, he may have to learn to drive the car (staff training). Once he has started the trip, he will want to know whether he is making satisfactory progress toward reaching California (monitoring). By reading the road signs he will know whether he is on the right road, and if he reaches his predetermined destination each day he will know that he is on schedule (feedback). If he sees a sign that tells him he is on the wrong road, he can alter his direction and get back on course. If he does not reach his daily destination, he will know that he probably underestimated the time and will want to revise his estimate. Unforeseen events such as a car breakdown (akin to the thousand and one uncontrolled events that can happen in a school system) could put him behind schedule. Our driver will know whether or not he has reached California if after a period of time he sees predetermined cues such as signs, landmarks, etc. (success criteria).

Consider now, what could happen if the man did not go through all the important steps. First, if he hadn't decided where to go (goal), it is obvious that he never could have started. Again he could not have started without a precise map of the route (plan of operation) he would wander aimlessly. If he hadn't made adequate preparations, he would risk getting stranded on the way. Without his map, the road signs and his stopping point each day would provide meaningless information. And finally, without knowing what cues to look for he would never know whether he had reached California. Even if he reached California he could never adequately describe to anyone else how to get there in an efficient way.

Suppose the evaluator is waiting in California for the man who never arrives. All the evaluator can do is note that the man has not arrived. He has no knowledge of whether the route the man took was one that didn't lead to California or something went wrong along the way. (It may be that it's just taking him a few more days due to car failure.) If the evaluator had gone on the entire trip he not only would know why the man hadn't gotten to California, but could have helped him correct any deficiencies along the way and increased the probability that he would have reached his destination.

Obviously, a method of evaluation that "goes along" will be of more utility than one that simply looks to see if goals have been met.[16]

"There is considerable evidence in both industry and education that only when the personnel responsible for conducting a program are involved in its examination and revision will the program improve and endure."[17]

Thus the DEM developed by Provus insures coordination and cooperation between project and evaluation so that program staff and recipients of program services alike are knowledgeable about the purposes and procedures of the evaluations. They then may willingly contribute to program improvement through evaluation.

This feature is judged by the participants to be the most significant single part of the DEM and an indispensible element in any evaluation system developed.

The ideal team membership for DEM would be structured as follows:

1. Several non-directive evaluation specialists skilled in small group process work and ethnological techniques, each of whom has responsibility for project-evaluation management but all of whom may team up to facilitate group work.

2. One or more psychometrists familiar with a wide range of group cognitive and affective instruments and capable of rapidly designing ad hoc instruments.

3. A research-design specialist capable of drawing carefully defined samples, designing experiments, and directing the statistical analysis of data.

4. One or more technical writers familiar with educational "language" and evaluation concepts.

5. A data-processing unit with the capacity for data storage, retrieval, and statistical analysis as directed.

6. Subject-specialist consultants.

7. A status figure capable of communicating directly with the superintendent of schools and all program directors.

ROBERT E. STAKE EVALUATION MODEL

In an attempt to evaluate educational programs many evaluators have formulated models and frameworks within which to accomplish this task. Robert Stake has designed a model inherent in which is the describing and judging of a mass of data. Stake's model assigns the evaluator the task of showing the relationship of all data obtained to the improvement of the program under study. He further assigns the evaluator the task of judging whether the outcomes desired or expected have been achieved. Finally the model allows us to note the congruence between what was intended and what was observed. It is with the use of his data gathering plan then that Stake feels decision-making will be facilitated.

Gathering data from several quite different sources in several quite different ways is needed according to Stake to fulfill the need of describing or judging an educational program. Whichever the purpose, three bodies of information should be tapped.

The evaluation report should help to distinguish between (1) antecedent, (2) transaction, and (3) outcome data. An antecedent is any condition existing prior to teaching and learning which may relate to outcomes. Transactions are the countless encounters of students with teacher, student with student, author with reader, parent with counselor, the succession of engagements which comprise the process of education. Outcomes as a body of information would include measurements of the impact of instruction on teachers, administrators, counselors and others. Outcomes are the consequences of educating immediate and long-range, cognitive and connative, personal and community-wide.

The evaluator prepares a record of what educators intend, of what observers perceive, of what patrons generally expect and of what judges value the immediate program to be. The record may treat antecedents, transactions and outcomes separately within the four classes identified as Intents, Observations, Standards, and Judgments.

According to Stake, the evaluator seems to be increasing his emphasis on a full description of any given educational program in addition to continuing what he considers to be the other basic act of evaluation - judgment. The judgments are based on a formal inquiry process including collecting the judgments of others.

Evaluators must seek out and record the opinions (judgments) of persons with special qualifications. The opinions though subjective can be gathered objectively, independent of the solicitor's opinions. Those groups whose opinions on education are important and relevant are: spokesmen for society at large, subject matter experts, teachers, parents, and the students themselves. These are the judges to be heard says Stake.

The evaluation of a school program, says Stake, should portray the merit and fault perceived by the well identified, involved and affected groups, systematically gathered and processed. Therefore, judgment data and description data are both essential to the evaluation of educational programs. To be fully understood, the educational program must be fully described and fully judged.

Role of the Evaluator

The evaluator is a specialist who concerns himself with collecting, processing and interpreting descriptive and judgmental data. In his observations the evaluator observes in a direct and personal way and sometimes uses instruments. He may give special attention to the measurement of student outcomes but he does not fail to observe the other outcomes, nor the antecedent conditions and the instructional transactions. When he selects the variable for evaluation he must make a subjective decision and he must obviously limit those to be studied. He should give primary attention to the variables specifically indicated by the educator's objectives. He must designate additional variables and search for unwanted side effects and incidental gains.

The evaluator should, according to Stake, be able to compare the Intents and Observations and note the discrepancies and describe the amount of congruence. He should also be in search for the contingencies between the antecedents, transactions and outcomes which are the relationships that permit the improvement of education. To test the logic of an educational contingency the evaluator relies on previous experience and perhaps research experience with similar observables.

Part of the role of the evaluator is to make known which standards are held by whom, in the evaluation. Standards vary from student to student, instructor to instructor, and from reference group to reference group.

Stake considers "goals," "objectives," and "intents" to be synonymous. He feels that the intents should include the planned for environmental conditions, the planned for demonstrations, the planned for coverage of certain subject matter as well as the planned for student behavior. To be included are effects which are desired, those which are hoped for, those which are anticipated and even those feared. This class of data includes goals and plans that others have, especially the students. Whatever the goals, we must when evaluating examine what teaching, as well as what learning, is intended. The responsibility for describing curricular objectives, according to Stake, is the evaluator's. He must continually ask the educator for statements of intent. Stake feels it is not wrong for an evaluator to teach a willing educator about behavioral objectives. Obtaining authentic statements of intent is a new challenge for the evaluator, says Stake.

Stake provides in his plan reports resulting from descriptive and judgmental data (including recommendations) to various audiences. The judgments are based on either absolute or relative standards.

In judging the characteristics of a program Stake says there are two bases: absolute standards reflected by personal judgments, and relative standards reflected by characteristics of alternate programs. Before making a judgment for reporting, the evaluator determines whether or not each standard has been met. To judge is to decide which set of standards to follow and to assign a weight or importance to each set. Rational judgment in evaluation is the decision as to how much attention is to be paid to each reference group (point of view) in deciding whether to take some action, says Stake. Relative comparisons find standards taken from descriptions of other programs. From relative and absolute judgment an overall rating of merit can be obtained in making an educational decision and from this judgment a recommendation can be developed.

Educational evaluation has, according to Stake, its formal and informal sides. Informal evaluation is recognized by its dependence on casual observation, implicit goals, intuitive norms and subjective judgment. Careful study, says Stake, reveals informal evaluation of education to be of variable quality, sometimes penetrating and insightful, sometimes superficial and distorted. Formal evaluation as Stake sees it is recognized by its dependence on checklists, structured visitation by peers, controlled comparisons and standardized testing of students. Some of these techniques have long histories of successful use, he says. He feels there is a great potential contribution to education of formal evaluation. He feels the potential could be realized in a number of ways. Educators should, for example, implore measurement specialists to develop a methodology that reflects the fullness, the complexity, and the importance of their programs. They should spell out more clearly antecedent conditions and classroom transactions and attempt to couple them with the various outcomes. There should be an effort made to measure the match between what an educator intends to do and what he does do. For the evaluation of curricula, attention to individual differences among students should give way to attention to the contingencies among background conditions, classroom activities, and scholastic outcomes.

Finally, the formal evaluation endorsed by Stake includes the evaluation of its materials. As stated before, the two basic acts of his formal evaluation are description and judgment.

Constructs Proposed

For any one educational program there are two principal ways of processing descriptive evaluation data according to Stake: finding the contingencies among (1) antecedents, (2) transactions, and (3) outcomes and finding the congruence between Intents and Observations. The relationship (contingency) among the (1) antecedents [conditions existing prior to teaching and learning], (2) transactions [countless encounters of student with teacher, student with student, parent with counselor, etc.] and (3) outcomes [abilities, achievements, attitudes and aspirations of students resulting from an educational experience] is sought by the evaluator that permits program improvement. In the search to see if what was intended (antecedents, transactions, outcomes) actually happened and were realized we discover the amount or degree of congruence. The evaluator compares the Intents and Observations, mating the discrepancies and describing the amount of congruence. The contingencies and congruences are subject to judgment by experts and participants. The importance of non-congruence will vary with the different viewpoints. Perceptions of the importance of congruence and contingency must be attended to very carefully by the evaluator.

Stake feels judgments must become an increasing part of the evaluation report. Evaluators must seek out and record the opinions of persons with special qualifications. The two bases of judging the characteristics of a program (1) with respect to absolute standards as reflected by personal judgments and (2) with respect to relative standards as reflected by characteristics of alternate programs. Each set of absolute standards, if formalized would indicate acceptable and meritorious levels for antecedents, transactions and outcomes. Before making a judgment the evaluator determines whether or not each standard is met. The judging act itself is deciding which set of standards to heed. More precisely Stake says judging is assigning a weight, an importance to each set of standards. Rational judgment in educational evaluation is a decision as to how much to pay attention to the standards of each reference group in deciding whether or not to take some administrative action.

Relative comparison is accomplished in a similar fashion except that the standards are taken from descriptions of other programs. The evaluator selects the characteristics to attend to and which reference programs to compare to. From relative judgment we can obtain an overall or composite rating of merit (perhaps with certain qualifying statements) a rating to be used for an educational decision. From this final act of judgment a recommendation can be composed.

Stake would have a panoramic view of what was being evaluated. His model allows us to gain from as many points of view as are significant the existing conditions, the countless encounters of all involved parties, and the outcomes or consequences. With his plan of contingency and congruence we never look at a segment in isolation; we always observe and consider relationships of all the parts.

Stake has determined that full description and full judgment are intrinsic in all formal evaluation. Stake feels that if rational judgments are to be made, and he emphasizes judgmental criteria as mandatory to making recommendations for decision-making, then informal techniques must be abandoned. Also he notes that too often judgmental statements are made about educational programs without describing the procedures used in arriving at the judgments.

To insure the publicness of evaluative statements, standards for making judgmental statements must be explicated. All evaluation studies are comparative in nature, in the sense that descriptive data are compared to either absolute or relative standards. If these standards are not made public according to Stake the credibility of evaluative statements can be legitimately questioned. The studies must be objective, scientific and reliable so that they might clearly be explained to the various audiences who seek this assistance for decision-making. The providing of immediate relative answers to assist in this is what is really being sought and must be gained for effective and beneficial continuance of any evaluation study.

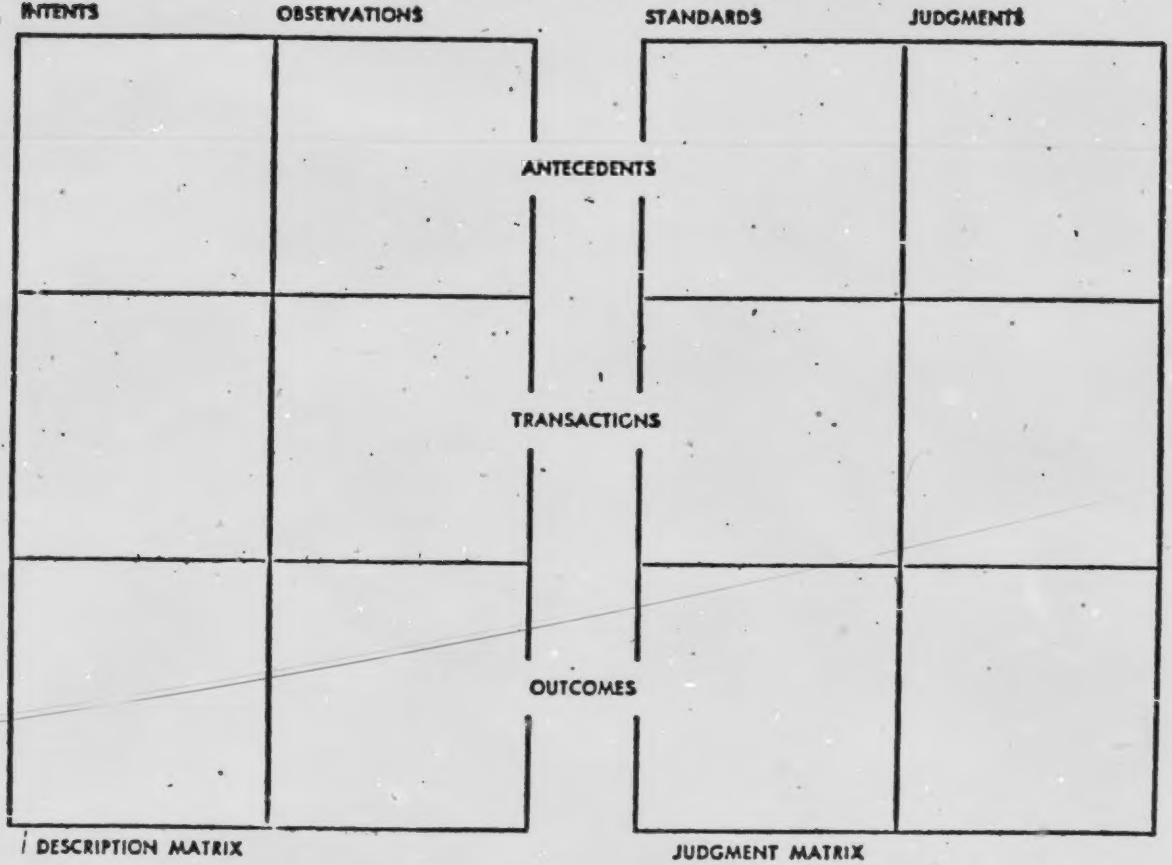
Design

The design for evaluation as proposed by Stake is very general in nature. Every educational program has a rationale though only implicit at times. It represents the philosophic background and basic purposes of the program. The evaluator must constantly ask himself, says Stake, whether the plan (evaluation) constitutes a logical step in the implementation of the basic purposes. The statement of purpose may be difficult to obtain or the instructor may not be effective at presenting it.

With the establishment then of a rationale clearly recognized by all, the implementation of the Description Matrix seeking the contingencies between the antecedents, transactions and outcomes and seeking further the congruencies between what was intended and what was observed will occur. Secondly, the implementation of the Judgment Matrix will occur. Here the evaluator uses the established or agreed upon Standards as a basis for Judgments which Stake feels are intrinsic in the required formal model of evaluation. These judgments will be relative and absolute and an overall rating of merit can be obtained to be used in making an educational decision.

Figure 4.

Description and Judgment Matrices


INTENTS
OBSERVATIONS
STANDARDS
JUDGMENTS
ANTECEDENTS
TRANSACTIONS
OUTCOMES
DESCRIPTION MATRIX
JUDGMENT MATRIX

In the evaluation of an educational program we must establish as nearly as possible what the rationale of the program is. Although implicit at times it does represent the basic purposes of any program. As the evaluator proceeds with the development of the Description Matrix and then to the Judgment Matrix he will have to constantly remind himself of this rationale so that there is an implementation of the basic purposes.

The Description Matrix includes the "Intended" and "Observed Antecedents," "Transactions" and "Outcomes." "Antecedents" are any of the existing conditions prior to the teaching and learning which may result. The student's aptitude, previous experience, interest and willingness are examples of the "Antecedents" which the evaluator will describe. "Transactions" include the succession of engagements which occur between students and their peers, teachers and counselors. "Transactions"are the dynamics included in discussion, explanation, administration. "Outcomes" result from the educational experience and include such things as students' abilities, achievements, attitudes and aspirations. "Outcomes" include not only those which are evident but application, transfer and relearning effects. "Outcomes" are the consequences of education - immediate and long range, cognitive and connative, personal and community-wide.

"Antecedents," "Transactions" and "Outcomes," the elements of evaluation statements are shown in the matrices to have a place in both description and judgment. To fill these in, the evaluator will collect judgments (community prejudice, problem solving styles, teacher personality) as well as descriptions. It is also indicated that judgmental statements are classified as general standards of quality or as judgments specific to a given program. Descriptive data are classified as intents and observations. The evaluator can organize his data-gathering to the matrix format.

The evaluator can prepare a record of what educators intend, of what observers perceive, of what patrons generally expect and of what judges value the immediate program to be. The record may treat antecedents, transactions, and outcomes separately within the four classes identified as "Intents," "Observations," "Standards," and "Judgments."

The "Intents" include on the matrix planned for demonstrations, planned for coverage of certain subject matter, etc., as well as planned for student behavior. The collection of "Intents" is a priority listing of all that may happen.

The "Observations" include a description of surroundings and events and subsequent consequences. These observations are done both in a direct and personal way and with the use of instruments. "Observations" are always made with the statement of purpose (Rationale) in mind.

The first two columns of the data matrix contain the descriptive data and the format for processing these data is represented there. The data for a curriculum are congruent if what was intended actually happened. To be fully congruent the intended antecedents, transactions, and outcomes would have to come to pass. The evaluator should be able to compare the cells containing "Intents" and "Observations" to note the discrepancies and to describe the amount of congruence for that row. Congruence does not indicate that outcomes are reliable or valid but that what was intended did occur. The evaluator's task is one of identifying outcomes that are contingent upon particular antecedent conditions and instructional transactions.

The contingencies and congruences identified by evaluators are subject to judgment by experts and participants just as more unitary descriptive data are. The importance of non-congruence will vary with different viewpoints. Perceptions of the importance of congruence and contingency deserve the evaluator's careful attention.

Limitations and Contributions

The most unique aspect of the Stake Evaluation Model used for the collection of information is his Description and Judgment Matrices. These Matrices are used in describing and judging educational programs based on a formal inquiry process.

Although the Stake Model does present limitations such as: (1) the inadequate methodology for obtaining information, (2) cells of design matrix overlap and the distinctions are not clear, and (3) there is the possibility of internal strife as a result because value constructs within the program could vary so; it does offer strong contributions to the evaluation field. It does provide a systematic method for arranging descriptive and judgmental data thus emphasizing the inter- and intra-relationships between them. It also considers both absolute and relative judgment.

MICHAEL SCRIVEN'S EVALUATION MODEL

Michael Scriven has outlined a method of evaluation which is known in educational circles as the Scriven Model.

This model essentially deals with two processes in the act of evaluating. It concerns itself with the beginning or formative evaluation of a project which is referred to as the producer's portion of the process and summative evaluation which concerns itself with the consumer or product portion of the project.

Scriven has built upon the foundation laid by Cronbach to suggest distinctions and procedures which are of great practical value for the evaluation specialist. He has elaborated on the functions of evaluation by noting that, while evaluation can play many roles in education, the evaluation process has only one functional goal - that of determining the worth or merit of something. By making this distinction, Scriven has emphasized that no study of any program can be labeled as evaluation unless some judgment is made.

Understanding the difference between the formative and summative roles will help the evaluator delineate those methods that may be appropriately used in any one evaluation study.

It is worth noting that the methods required reliably to arrive at an overall appraisal in the Scriven Model have by no means been fully specified. It is a loosely woven set of ideals that in practical application have not been fully realized at this point in the development of the evaluation process. Scriven relies on the use of experts in making judgments.

Evaluation is described by Scriven at the methodological level as a gathering and combining of performance data with a weighted set of goal scales. At the sociological or pedagogical level he becomes concerned with possible roles of evaluation.

Scriven held that evaluation should attempt to answer certain types of questions about certain entities. The entities are the various educational "instruments," processes, personnel, procedures or programs. It is meant to establish and justify the merit and worth of the above.

The major activities of the evaluator consist in gathering and combining performance data with a weighted set of goal scales to yield either comparative or numerical ratings in the justification of (a) the data gathering instruments, (b) the weightings and (c) the criteria selected.

The role which evaluation plays varies. It may form part of a teacher-training activity, of the process of curriculum development, of a field experiment connected with the improvement of learning theory, of an investigation preliminary to a decision about purchase or rejection of materials; it may be a data gathering activity supporting a request for tax increases or research support, or a preliminary to reward or punishment of people as in an executive training program, a person or a classroom.

Role of the Evaluator

The basic fact is that the evaluator, while a professional in his own field, is usually not a professional in the field relevant to the curriculum being reformed or, if he is, he is not committed to the particular development being undertaken. The evaluator therefore must recognize as his responsibility the uncovering and formulating of a testable set of criteria for the subject being evaluated. Scriven holds the evaluator responsible for making these judgments through his role in looking at goals, judging their worth and determining their worth. Formative evaluators should be sharply distinguished from summative evaluators with whom they may work in developing an acceptable summative design. Scriven states that if such a distinction is made, it becomes possible to retain the advantages of objective professional evaluation without disrupting team efforts.

This total examination by the evaluator of comparative merit is done through evaluation reports with judgments explicitly stated for either producers or consumers.

The goals set forth by the formative evaluation and the product being judged at the summative end must be, according to Scriven, judged on their merit and worth in relationship to the goals and objectives set forth by the system.

The evaluation must include, as an equal partner with the measuring of performance against intended goals, procedures for the evaluation of the goals themselves.

Any curriculum project has some kind of general objectives at the very beginning. These are elaborated on and judged by the expert evaluator in relationship to their worth dependent upon the needs of the situation.

Relationship to Decision Making

How the information produced by an evaluation study using any one approach is related to the decision-making process is of key importance in the use of any evaluation process. In the Scriven model judgments are explicitly stated for both producers and consumers in evaluation reports and utilized in decision making.

Types of Evaluation

Scriven cites the following as types of evaluation:

1. Formative - summative
2. Comparative - non comparative

3. Intrinsic - payoff

4. Mediated.

Formative - to assist in developing curricula.

Summative - to assess the merit of curricula once they have been developed and put on the market.

Comparative - to look at judged merits of content matter and goals and evaluate them in relationship to tests that are based on comparative norms.

Non-Comparative - to judge them on their own or absolute scale or scores.

Comparative evaluations are often very much easier than non-comparative evaluations because we can often use tests which yield differences instead of having to find an absolute scale and then eventually compare the absolute scores.

Scriven recommends an outside expert be responsible for choosing any instrument.

Intrinsic - this involves an appraisal of the instrument itself; in the analog this would involve the evaluation of the content, goals, grading procedures, teacher attitudes, etc. This is also called secondary evaluation. The criteria is usually not operationally formulated, and they refer directly to the instrument itself but only indirectly to its educational effectiveness or results. Defenders of the method state this is the only way values can be evaluated.

Pay-off - this approach proceeds via an examination of the effects of the teaching instrument on the pupil, and these alone, and it more usually specifies these rather operationally. It describes effects on teachers, parents, etc., and may also show relevant effects. It may involve an appraisal of the differences between pre and post tests, between experimental group tests and control group tests.

The appeal of pay-off evaluation to the defenders of it is the correlation of the evaluation of goals and methods with the actual effects on students.

Mediated - Scriven outlines the following guide for practical implementation of mediated evaluation:

A three track approach to realize the objectives of a curriculum project through use of a project team who are assigned the task of goal formulation.

a) As the project develops, the goals formulated should be regularly re-examined and modified in the light of divergencies from them that have arisen during the developmental activities, where it is felt that these changes have led to more valuable goals.

b) Work should begin on the construction of a test-question pool. Progress tests will begin and the items can be thrown into this pool. The construction of this pool is the construction of the operational version of the goals. It should therefore be scrutinized at the same time as re-examination of the more abstractedly formulated goals occur.

c) At this stage work should begin in getting some external judgments as to the cohesiveness of the alleged goals, the actual goals and the test question pool.

The Scriven Model involves drawing a distinction between goals (claims) and roles (functions) and involves several types of evaluation.

In terms of goals, Scriven's evaluation attempts to answer certain types of questions about certain entities. The entities are the various educational instruments (processes, personnel, procedures, programs, etc.). The types of questions include questions of the form: How well does the instrument perform (with respect to such and such criteria)? Does it perform better than this other instrument? What merits, or drawbacks does this instrument have (i.e., What variables from the group in which we are interested are significantly affected by its application)? Is the use of this instrument worth what it's costing? These activities consist simply in the gathering and combining of performance data with a weighted set of criterial scales to yield either comparative or numerical ratings and in the justification of (a) the data gathering instruments, (b) the weightings, and (c) the selection of criteria.

The roles of evaluation according to Scriven, may be different according to the context of a particular educational situation. It may form part of a teacher training activity, of the process of curriculum development, of a field experiment connected with the improvement of learning theory, of an investigation preliminary to a decision about purchase or reception of materials; it may be a data gathering activity, etc.

Within the framework of the model are the underlying principals of formative and summative evaluation; comparative and non-comparative evaluation; intrinsic and pay-off evaluation; and mediated evaluation.

Scriven has based his criteria for selecting and judging evaluation procedures on (1) the establishment of goals, (2) the determination of the worth of the evaluation, (3) the presence of those constructs which are valid for the evaluation being done, and (4) the employment of both formative and summative evaluation as a wholistic approach to program evaluation.

Implications for Design

The theme which runs through Scriven's thesis is the concern initially for the evaluation of objectives as prerequisite for program evaluation.

The process of looking at many factors and the valuing of or the making of value judgments on the merit of the objectives before a program can be judged worthwhile is the basis for the scientific process employed to judge the merit and worth of the program.

The distinction made between the formative and summative evaluation gives a special implication for curriculum workers who must design a plan for evaluation. The taxonomy of the criteria for evaluation gives the evaluator a checklist with which to work. The following is a rather generalized skeletal framework of the Scriven taxonomy that could hold implication for design.

1. Conceptual Description of Educational Objectives
    a. Knowledge of;
    b. Comprehension cr understanding of;
    c. Motivation (attitude/values/affect);
    d. Non-mental abilities;
    e. Non-educational goals.
2. Manifestation Dimensions of Critical Variables
    a. Knowledge
    b. Comprehension

    c. Attitude
    d. The non-mental abilities

3. Follow up data on above.

4. Secondary Effects
    a. Effects on teachers
    b. Effects on teachers' colleagues
    c. Effects on other students
    d. Effects on administrators
    e. Effects on parents
    f. Effects on school or college
    g. Effects on the taxpayer
    h. Sundry effects

5. Values and Costs
    a. Range of utility
    b. Moral considerations
    c. Costs

6. Explanatory Evaluation (sometimes a part of process research and should be secondary to previous kinds of evaluation.)

Contributions

The major contributions of the Scriven model are:

1. The application of the discrimination between formative or on-going evaluation and summative or product evaluation.

2. The focus on the direct assessment of the worth of the objectives as determining the merit of the evaluation. The concept of valuing as a prime consideration in the process of evaluating.

3. The application of the many types of roles in diverse contexts in the process evaluating.

4. The determination that although evaluation can play more roles, the prime purpose is to determine the worth or merit of something.

5. The delineation of the types of evaluative procedures and the purposes for each (summative-formative; comparative-non-comparative; intrinsic-payoff; and mediated).

6. The analysis of determining the credibility of the means and the justification of the ends.

Limitations

1. The determination of the facets of the program, including all the variables for the student along with the costs and all other possibilities, in determining the worth of the program creates tremendous methodological problems.

2. There has been developed no process for assessing the validity of judgments being made.

3. There are several ambiguous overlapping concepts that have not been spelled out.

4. The model relies on the employment of outside experts rather than local staff already on hand.

OTHER EVALUATION MODELS

In addition to the analyses made of the major evaluation models reported above, analyses were also made of other designs which appear less frequently in the literature. These include the work of Newton S. Metfessel and William B. Michael; Robert L. Hammond, and Ralph Tyler.

NEWTON S. METFESSEL AND WILLIAM B. MICHAEL

University of Southern California

The thesis upon which Metfessel and Michael operate in their design for evaluation is largely based on the Tyler model of comparing measured performance with behavioral standards. Objectives are stated as operational definitions involving measurable and observable changes in behaviors that have been judged to be significant and relevant to the broad goals and the philosophy of the educational institution under study.

Definition

Comparing measured performance with behavioral standards. Criterion measures are used in evaluation of the attainment of objectives in school programs. Specific objectives both in the cognitive and affective domains are stated.

Purpose

To formulate recommendations that furnish a basis for further implementation, for modifications, and for revisions in broad goals and specific objectives. Metfessel and Michael feel that this may be of some help to teachers, administrators, counselors and consultants to public schools, and other professional personnel whose experience in evaluation may be limited.

Key Emphasis

Specification of objectives and using multiple criterion measures to assess outcomes. They key in on the involvement of many different audiences.

Their paper, "A Paradigm Involving Multiple Criterion Measures for the Evaluation of the Effectiveness of School Programs,"[18] lists eight major steps in the evaluation process.

Types of Evaluation

In brief they are capsuled as follows:

1. Involvement of many people from all areas of school and home community.
2. Construction of a cohesive paradigm of broad goals and specific objectives.
3. Translation of specific objectives into communicable form.
4. Development of necessary instrumentation for criterion measurement.
5. Periodic observations through instruments of behavioral measurement.
6. Analysis of data.
7. Interpretation of data in terms of judgmental standards and values.
8. Formulation of recommendations.

Role of the Evaluator

The evaluator is a measurement specialist who involves lay individuals, school people and students in developing a set of recommendations.

The evaluator is familiar with both standardized and nonstandardized instruments and techniques to collect data on evaluation studies.

Relationship to Decision-Making

Suggestions are made concerning revisions in objectives or program strategies. Feedback is given to all individuals involved in the school program.

The specific behavioral objectives are translated into a form that is both communicable and applicable to facilitating learning. Recommendations can thus be made for further implementation, for modification and for revisions in the broad goals and specific objectives so that improvements can be realized.

Constructs Proposed

The system of multiple criterion measurement is set forth as follows:

1. Measures which are indicators of status or change in cognitive and affective behaviors of students in terms of standardized measures and scales.

2. Measures which are indicators of status or change in cognitive and affective behaviors of students by informal or semiformal teacher-made instruments or devices.

3. Measures which are indicators of status or change in student behavior other than those measured by tests, inventories and observation scales in relation to the task of evaluating objectives of school programs.

4. Measures which are indicators of status or change in cognitive and affective behaviors of teachers and other school personnel in relation to the evaluation of school programs.

5. Measures which are indicators of community behaviors in relation to evaluation of school programs.

Implications for Design

The eight stage evaluation process sets forth a model which, if implemented, would give a design involving a wide audience, and specification of objectives. The provision for periodic observations adds credibility to the constant and consistent measurement using multiple criterion. Provided also is the method for interpretation and recommendation to the various audiences.

Contributions

The major contributions are judged to be in (a) the involvement of a large audience; (b) the specification of objectives; (c) the continuous feedback and periodic observations; (d) the laying out of the multiple criterion measurements for the user; (e) the inclusion of reporting to the various audiences as a vital part of the evaluation process; (f) using measurement and technology for objective data gathering; and (g) the ease within which the model may be applied.

Limitations

The following are limitations of the Metfessel, Michael Model:

1. Too much focus on traditional, standardized instrumentation.
2. Testing is excessive and thereby impractical.
3. The focus is only on outcome. Little is done on process or antecedent evaluation.
4. There is a lack of methodology for establishing standards, evaluating their relevance, or modifying them during the process.

ROBERT L. HAMMOND
University of Oregon

The thesis developed by Robert Hammond states that the success or failure of innovations in modern programs of instruction is determined by the interaction of specific forces within the educational environment. He cites these forces in terms of specific dimensions and variables which operate in a three dimensional structure, the interaction of which produce combinations of effects which must be considered in the evaluation of a given program. The importance of any combination of these variables is determined by the nature of the program selected for study.

Definition

Hammond assesses the effectiveness of current and innovative programs at the local level by comparing behavioral data with pre-set objectives.

Once the forces affecting a given innovation have been identified and placed in a structure which permits an analysis of the interaction of these forces, the next step is that of placing the structure in a working model for evaluation through carefully defined steps.

Purpose

The purpose of this model is to find out whether innovation is effective in achieving expressed objectives.

Hammond states that once the objectives have been defined, it is up to the evaluation effort to measure the behavior described in the objectives through analysis of collected data.

Key Emphasis

Hammond stresses the importance of local program development in evaluation.

He recommends that teachers and administrators attain skills necessary to evaluate instructional programs. Once these skills have been developed, the school district should progress to the point that they can operate independently of any external evaluation support.

Role of Evaluator

The evaluator should be a consultant who provides expertise in data collection and trains local evaluators (program personnel).

The personnel might need to secure the help of measurement and analysis specialists but should also seek assistance from an evaluator who would at the same time train them sufficiently to carry out most future steps in future evaluation studies unassisted.

Relationship to Objectives

This evaluation focuses on the definition and measurement of behavioral objectives.

Hammond places objectives stated in behavioral terms in the Behavioral Dimension of his model. He recognizes the three variables of "Cognitive," "Affective," and "Psychomotor" behaviors (perceptual variable is being studied). The study of a given factor is determined by time, availability of tests and procedures, and the needs of a given school district.

Relationship to Decision Making

Evaluation is the source on which to base decisions about instructional, institutional and behavioral dimensions.

Sound evaluation procedures require that the process begin with a thorough examination of the current programs. Before attempts at innovation are made, adequate baseline data is required to make those decisions which determine the direction of the change process.

Types of Evaluation

The Hammond model uses three dimensions for describing programs: (1) the Instructional Dimension; (2) the Behavioral Dimension; and (3) the Institutional Dimension.

Each dimension consists of a number of specific variables.

The Instructional Dimension describes the innovation in terms of five such variables. The variables are: Organization, Content, Methodology, Facilities and Costs.

Constructs Proposed

This model sets up the following constructs:

1. The application of the kind of evaluation design to the existing program.

2. Decisions about the adequacy of the current program in relationship to the objectives.

3. Feedback from the decisions about the program adequacy leads to innovation. Is it necessary?

4. Application of the evaluation is studied in its relationship to the evaluation.

5. Continuing feedback.

Implications for Design

The use of a multi-variate structure focusing on interaction of dimensions. Both the variables and the dimensions are discussed within this report. This is shown as a systematic way to assess the effectiveness of both current and innovative programs.

Contributions

The outstanding contributions of the Hammond model are considered to be:

1. The use of local personnel who can carry on the evaluation process once it has been initiated.

2. The consideration of interaction of the dimensions and variables which constitute a total appraisal.

3. Emphasis on feedback in program development and revision. Self evaluation and rethinking of action is continuous.

4. Specification of behavioral objectives. This, as Hammond states, represents one of the most crucial steps in the evaluation process. Properly stated objectives will: (a) specify the kind of behavior which will be accepted as evidence that the learner has achieved the objective; (b) state the conditions under which the behavior will be expected to occur; and (c) specify the criteria of acceptable performance by describing how well the learner must perform.

Limitations

There is difficulty quantifying data involving several of the dimensions and variables. Additionally, the model, because of its intricacies, may be complex and time-consuming to set up.

The "cube" representing the dimensions and variables might become the source of evaluation rather than the objectives that are underlying.

The model neglects the importance of informed judgment.

The motivation of local personnel is a problem unconsidered in Hammond's model.

RALPH W. TYLER

Tyler's thesis states that the process of evaluation is essentially the process of determining to what extent the educational objectives are actually being realized by the program of curriculum and instruction. Since educational objectives are essentially changes in human beings or aimed at producing certain desirable changes in behavior patterns, evaluation is the process of determining the degree to which these changes in behavior are actually taking place.

Definition

Comparing student performance with behaviorally stated objectives. This is basically a congruence definition first proposed by Tyler as an outgrowth of his work in the Eight-Year Study at Ohio State University.[18]

Purpose

To determine the extent to which purposes of a learning activity are actually being realized by the program of curriculum and instruction.

Key Emphasis

There is a specification of objectives and a measuring of the learning outcomes of pupils. Since objectives are essentially changes in human behavior, the objectives aimed at are to produce certain desirable changes in the behavior patterns of students.

Role of the Evaluator

Tyler sees the evaluator as a curriculum specialist who evaluates as part of curriculum development and assessment.

Relationship to Objectives

The evaluation implies attainment of the behavioral objectives first identified at the beginning of the course or program.

Relationship to Decision Making

The gathering of actual pupil performance data will provide the information for the decision-maker to use to identify strengths and weaknesses of a course or curriculum.

Types of Evaluation

Tyler uses the Pre- and Post-measurement method of evaluating the congruence of performance with objectives.

Constructs Proposed

The following are those constructs proposed by Tyler in his evaluation model:

1. Statements of objectives in behavioral terms.

2. Teaching objectives are pupil-oriented.

3. Objectives must consider pupils' entry behavior, analysis of our culture, school philosophy, learning theories, new developments in teaching, etc.

Criteria for Judging Evaluation

The criteria for evaluation must rely on:

1. Behavioral objectives that are clearly stated.

2. Objectives that contain references not only to course content but also to mental processes applied.

Implications for Design

There must be interpretation and the use of assessment when designing program. The designs developed should assess student progress.

Contributions

The Tyler model contributions may be listed as follows:

1. It is easy to assess whether behavioral objectives are being achieved.

2. It is easy for practitioners to design evaluative studies.

3. It checks the degree of congruency between performance and objectives and focuses on a clear definition of objectives.

Limitations

There is a tendency to oversimplify program and focus on the terminal rather than on on-going and pre-program information.

There is a tendency to focus directly and narrowly on objectives, with little attention to the worth of the objectives.

CHAPTER IV

THE NEW ROCHELLE EVALUATION MODEL

The evaluation model adopted by the practicum participants was developed from Stufflebeam's CIPP Model. In addition to the basic structure of the CIPP model, however, the New Rochelle approach incorporated the concepts of a team and discrepancy evaluation of Provus, as well as the methods for the collection of descriptive and judgmental data emphasized by Stake. The model also contains elements derived from summative evaluation as described by Scriven and suggested the development of a new organization structure for the school district as well as new role descriptions for staff, concepts implied in the writings of Hammond and Tyler.

The resulting eclectic menage is the framework which the participants believe will most effectively serve the subject district at the present time.

THE MODEL

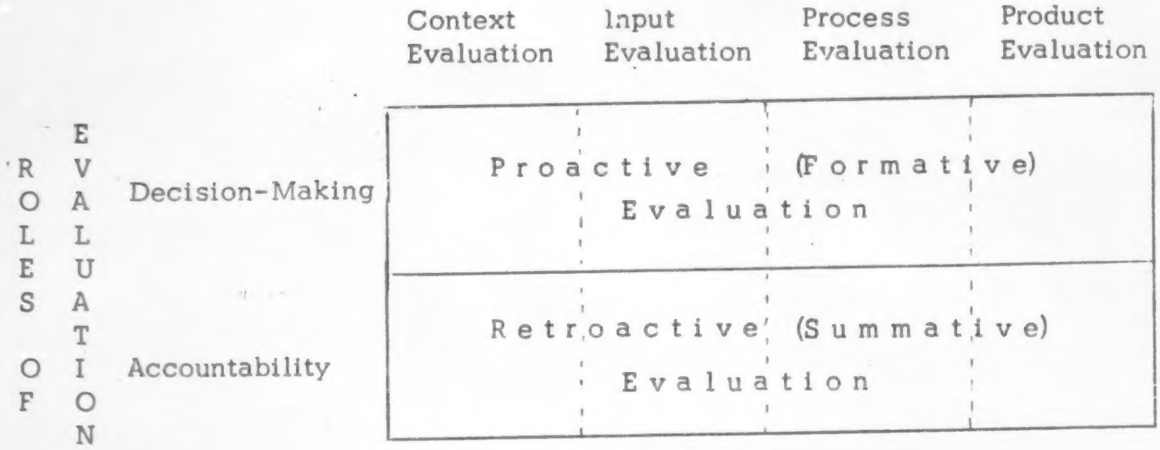
The unifying theme for the New Rochelle Model is the following definition:[19]

> Evaluating is the process of delineating, obtaining, and providing useful information for judging decision alternatives.

This definition emphasizes that evaluation is a continuing process; that this process includes the three steps of delineating, obtaining, and providing information; and that this information should meet criteria of utility and should guide decision-making.

Given that evaluation supplies information for decision-making, the decisions to be served must be known. Decisions are divided into four classes called planning, structuring, implementing, and recycling decisions. Planning decisions are choices of objectives. Structuring decisions are those in designing projects to achieve given objectives. Those required for operationalizing and executing a project design are implementing decisions. Recycling decisions refer to the judgment of and reaction to project results.

Figure 5.


Context Evaluation
Input Evaluation
Process Evaluation
Product Evaluation
ROLES OF EVALUATION
Decision-Making
Accountability
Proactive (Formative) Evaluation
Retroactive (Summative) Evaluation

A Framework that Relates CIPP to the
Formative-Summative Conception of Evaluation

The CIPP aspect of the evaluation process includes the three main steps of delineating, obtaining, and providing. Delineating the questions to be answered and providing obtained information to decision-makers are interface activities requiring collaboration between evaluator and decision-maker. The obtaining of information is a technical activity involving measurement, data processing and statistics, and is executed mainly by the evaluator, or in the case of the New Rochelle Model, by the evaluation team. The delineating, obtaining, and providing steps provide the basis for the New Rochelle methodology of evaluation.

Figure 6 is a framework for designing evaluation studies. It includes the dimensions of types of evaluation, uses of evaluation, and the steps in the evaluation process.

To use this framework, one should first determine what types of evaluation will be conducted and then for each selected type determine whether decision-making and/or accountability is/are to be served. Then the delineating, obtaining and providing steps should be defined for each of the chosen columns in the matrix. The result of using this framework is a set of evaluation designs to be implemented. In general, such designs specify what questions will be addressed, how the needed information will be obtained, and how the information will be reported to the designated audiences.

Figure 6.

Evaluation Types	Context Evaluation		Input Evaluation		Process Evaluation		Product Evaluation	
Uses	Decision Making	Accountability	Decision Making	Accountability	Decision Making	Accountability	Decision Making	Accountability
Steps Delineating	← (What questions will be addressed?) →							
Obtaining	← (How will the needed information be obtained?) →							
Providing	← (How will the obtained information be reported?) →							

A Framework for Designing Evaluation Studies

According to CIPP, evaluation designs and reports should be judged in terms of three standards. The first is technical adequacy and concerns validity, reliability, and objectivity. The second standard is utility and involves the relevance, scope, timeliness, importance, pervasiveness, and credibility of the evaluation. The third standard is cost/effectiveness.

Evaluation has a basis in the need for information which requires the delineation of information needs, and has utility in making decisions which require providing information. Both delineating and providing useful information for judging decision alternatives require interaction with decision-makers and/or potential audiences. This interaction defines the interface of evaluators with other roles. Schematically, the interfaces appear as shown in Figure 7 below.

Since there are four kinds of decisions, there are also four kinds of evaluation. Context evaluation serves planning decisions by identifying unmet needs, unused opportunities, and underlying problems. Input evaluation serves structuring decisions by projecting and analyzing alternative procedural designs. Process evaluation serves implementing decisions by monitoring project operations. Product evaluation serves recycling decisions by identifying and assessing project results.

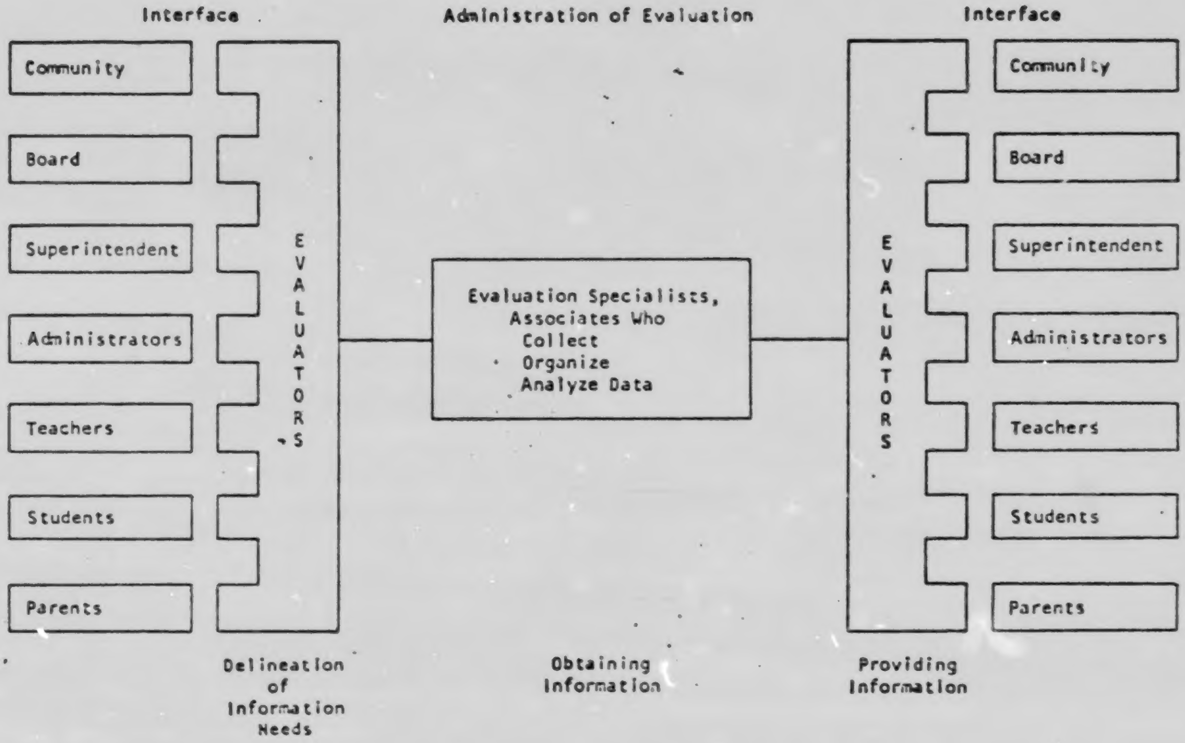
In addition to serving decision-making, the Model provides a basis for accountability. Context evaluation provides a record of objectives chosen, those rejected, and the relation of chosen and rejected objectives to information about needs, opportunities, and problems. Input evaluation provides a record of the actual implementation process. Product evaluation records project attainments and decisions concerning the continuation, modification or termination of the project. Overall, through recording information and the decisions influenced by the information, program managers can maintain a strong basis for accountability.

One way to summarize the CIPP aspects of the Model is the framework that relates its four evaluation types to their two uses. Figure 5 shows that context, input, process, and product evaluation serve both decision-making and accountability. By equating evaluation for decision-making to formative evaluation and evaluation for accountability to summative evaluation one can see in this framework the relationship between the Scriven and CIPP conceptualizations of evaluation. The four kinds of evaluation are formative if they are conducted proactively to serve decision-making. They are summative if they are conducted retroactively to serve accountability.

Evaluators are shown in interface with the many roles to be found operating in the educational community, all members of which are potentially decision-makers. The process of delineating information needs requires the evaluator to work with decision-makers and members of the educational community. The evaluator will be establishing decision settings as well as the criterion variables that will be applied in the evaluation.

At the opposite end of the evaluation process - that of providing information - are shown interfaces of the evaluator with the same multiple role types. The evaluator may be delineating information needs in relation to only one or two people, perhaps the superintendent and other administrators. He may then be reporting back to these same people - providing information. The evaluator will be determining, through interaction with many people, more broadly-based information needs, and that his report will be made to an audience much broader than the primary decision-maker.

Figure 7.

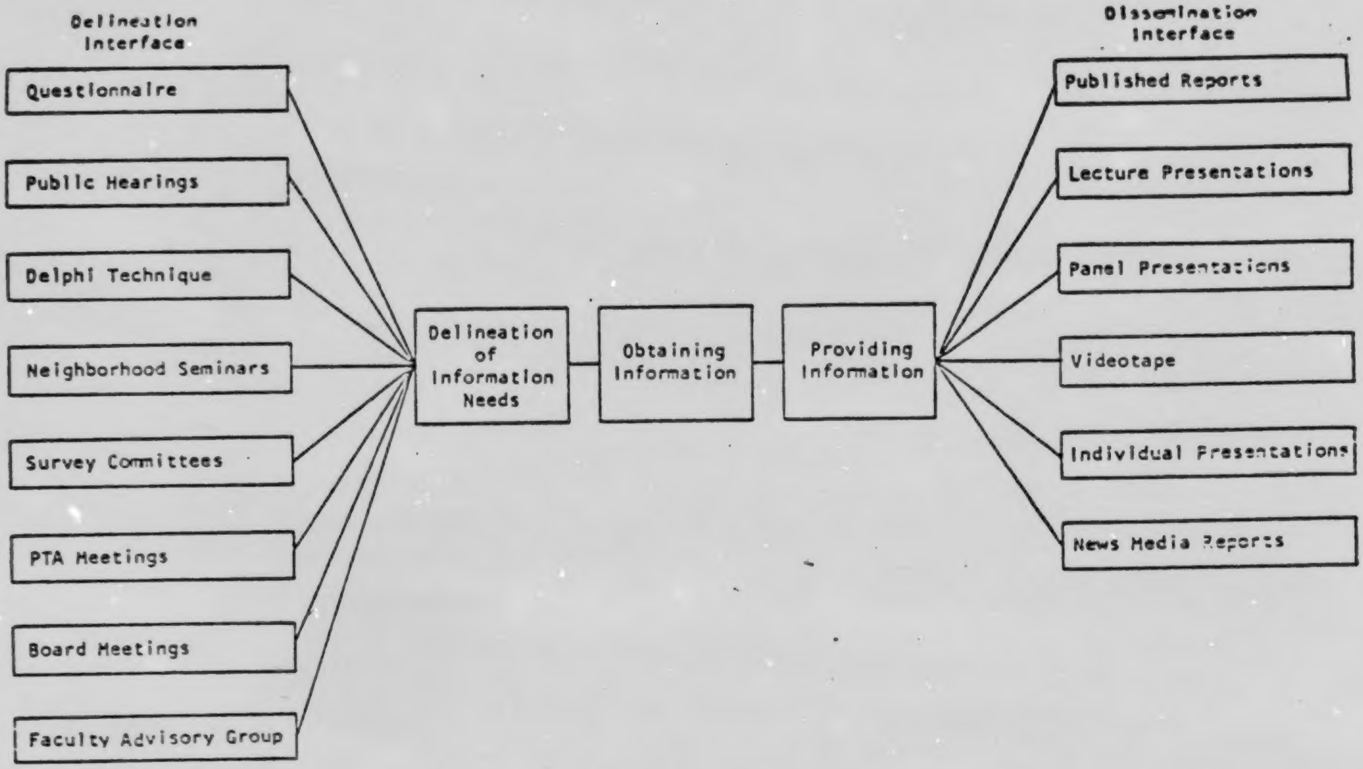

Interface
Administration of Evaluation
Interface
Community
Board
Superintendent
Administrators
Teachers
Students
Parents
EVALUATORS
Evaluation Specialists, Associates Who Collect Organize Analyze Data
EVALUATORS
Community
Board
Superintendent
Administrators
Teachers
Students
Parents
Delineation of Information Needs
Obtaining Information
Providing Information

Interfaces of Evaluators with Decision-Makers and/or Audiences

Figure 8 illustrates various methods which will be used by the evaluator in delineating information needs, as well as numerous media or methods to be used in disseminating the information provided.

Emphasis is placed on the delineation and providing of information because so much of the evaluator's work is dependent upon his successful interaction with these many roles.

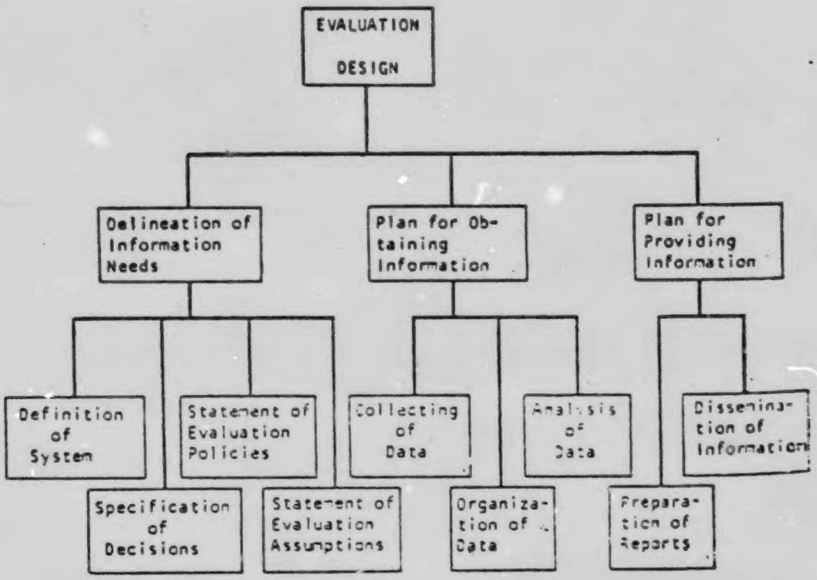
Figure 8.


Delineation Interface
Questionnaire
Public Hearings
Delphi Technique
Neighborhood Seminars
Survey Committees
PTA Meetings
Board Meetings
Faculty Advisory Group
Delineation of Information Needs
Obtaining Information
Providing Information
Dissemination Interface
Published Reports
Lecture Presentations
Panel Presentations
Videotape
Individual Presentations
News Media Reports

Interface Methodologies with Decision-Makers and/or Audiences

The overall framework for the evaluation design is based on the three major task areas of the definition, developed by Stufflebeam, - delineating, obtaining and providing. These three areas can be broken down into activities which will be related to the decision setting, the decision maker, and the type of evaluation required. These activities, within units, each have a series of tasks. Figure 9 depicts these units of activity and the tasks within.

Figure 9.


EVALUATION DESIGN
Delineation of Information Needs
Plan for Obtaining Information
Plan for Providing Information
Definition of System
Specification of Decisions
Statement of Evaluation Policies
Statement of Evaluation Assumptions
Collecting of Data
Organization of Data
Analysis of Data
Preparation of Reports
Dissemination of Information

Work Breakdown for Evaluation Design

The New Rochelle evaluation model will involve the following steps. First, the evaluation team will delineate the activities that are to be evaluated, the decisions about those activities that are to be served, the information needed to service those decisions, and the policies that will govern obtaining and providing the information. Second, they will obtain the needed information. Third, they will communicate this information to those who will make the decisions. This process ensures that decisions are made that can result in defensible goals and in activities which are efficient and effective in meeting these goals.

Forming the basis for the evaluation model proposed are the following eight premises:

1. Since the purpose of evaluation is to provide information for decision-making, it is necessary to know the decisions to be served.

2. For evaluation to be relevant to decision-making, the evaluator must be oriented to the decisions to be served and function within this orientation.

3. A valid evaluation model should be grounded in sound conceptualizations of the different change settings (homeostatic, incremental, and neomobilistic) and models (synoptic, disjointed incremental, and planned change) to be served.

4. Different types of decisions (planning, structuring, implementing, and recycling) require different types of evaluation designs, and a generalizable and efficient evaluation model should be conceptualized accordingly.

5. While different evaluation designs vary in content, a single set of generalizable steps (delineating, obtaining, and providing) can be followed.

6. To answer questions posed by decision-makers, designs for evaluation studies should satisfy criteria of scientific adequacy (internal and external validity, reliability, and objectivity), of practical utility (relevance, importance, scope, credibility, timeliness, and pervasiveness) and of prudential worth efficiency.

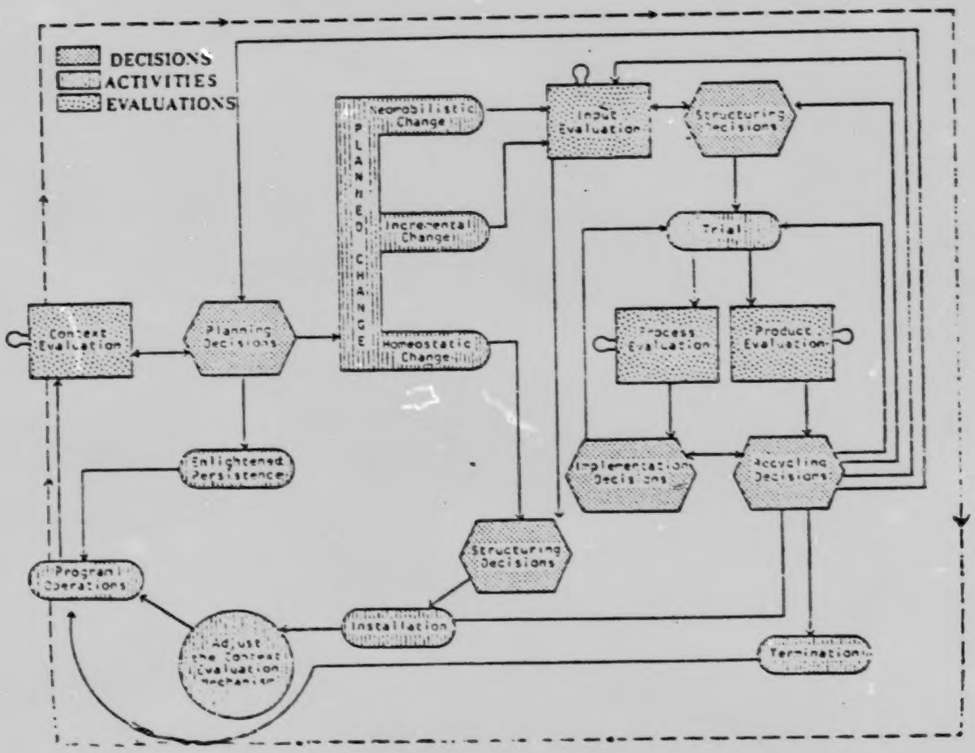
7. Decision-making is comprised of four stages (awareness, design, choice, and action) that potentially require evaluative information; thus, the relationship between evaluation and decision-making is symbiotic.

8. Since decision-making requirements are subject to change, evaluation designs should be flexible and capable of meeting changing requirements.

Figure 10 is presented as an overall model for the total evaluation program being proposed herein. It provides for systematic context evaluation and ad hoc input, process, and product evaluations. This chart retains the basic relationships between activities, evaluation, and decisions. The small loop (=O) attached to each evaluation block denotes the general process of delineating, obtaining, and providing information that is inherent in any evaluation study.

The outer cycle represents a continuous, systematic context evaluation mechanism that provides both congruence and contingency context data. This mechanism delineates, obtains, and provides information to the planning body of a system to enable it to make decisions either to change the system or to continue with present procedures because they are serving important objectives effectively and efficiently.

Figure 10.


DECISIONS
ACTIVITIES
EVALUATIONS
Neomobilistic Change
PLANNED CHANGE
Incremental Change
Homeostatic Change
Input Evaluation
Structuring Decisions
Trial
Process Evaluation
Product Evaluation
Implementation Decisions
Recycling Decisions
Context Evaluation
Planning Decisions
Enlightened Persistence
Program Operations
Structuring Decisions
Installation
Adjust the Context Evaluation Mechanism
Termination

An Evaluation Model

The proposed model combines four evaluation and evaluation-related concepts into a single generalizable model for evaluation. These are the three major steps in the evaluation process (delineating, obtaining, and providing), the three classes of change settings (homeostasis, imcrementalism, and neomobilism), the four types of evaluation (context, input, process, and product), and the four types of decisions (planning, structuring, implementing, and recycling).

The following features apply to this model:

1. Adequate system evaluation requires the existence of a formal context evaluation mechanism.

2. Leadership personnel in the context evaluation mechanism should have a continuing and direct relationship with those who formulate policy and planning decisions within the system.

3. Context evaluation should be based upon a data base appropriate for the relevant system.

4. The context evaluation mechanism should provide both congruence and contingency data pertaining to the total system.

5. Adequate resources should be at the disposal of the context evaluation mechanism to enable the performance of ad hoc input evaluation studies.

6. Context evaluation is conducted in a general undifferentiated setting, while input, process and product evaluations usually occur within specific, suboptimized settings.

7. In incremental and neomobilistic settings, structuring decisions should include specifications and budgetary provisions for the conduct of process and product evaluation studies.

8. Input, process, and product evaluation studies should be more comprehensive and highly structured for neomobilistic change than for incremental change.

9. Input, process, and product evaluation to support homeostatic change generally do not require formal evaluation studies by evaluation units.

10. Process and product evaluation should be carried on simultaneously, with process evaluation receiving heavier emphasis early in a trial and product evaluation receiving heavier emphasis as the trial progresses.

11. Product evaluation assesses attainments of change projects within a system, and context evaluation assesses the impact of the change on the total system.

12. All evaluation studies should follow the same general process of delineating, obtaining, and providing information.

13. Generally speaking, evaluation and decision-making functions should be separated. To insure the objectivity of both the decisions and the evaluation, it is important that information be collected, organized, analyzed, and reported by persons trained in these functions, but they should not be responsible for the strengths and weaknesses of the program being evaluated.

14. To maximize the effectiveness and efficiency of evaluation, evaluation itself should be evaluated. The criteria for this include internal validity, external validity, reliability, objectivity, relevance, importance, credibility, scope, pervasiveness, timeliness, and efficiency.

In order to implement and maintain the functioning of such a model it is necessary to develop evaluation teams similar to that proposed by Malcom Provus. The primary function of these teams is to:

(a) play a role in the evaluation process, and

(b) monitor the functioning of the evaluation model itself.

This evaluation team will identify and collect information essential to decision-making and program improvement. The team is responsible for answering the following questions:

1. Is the program defined?
2. Is the corrective action adequately defined?
3. Is corrective action installed?
4. Is program installed?
5. Are the enabling objectives being met?
6. Are the terminal products delivered?

These basic questions will be dealt with in stages. The following is a list of examples of questions to be raised and answered by the team, and a list of activities in which they will be engaged:

1. Has the program been installed?
2. Compare program definition with installation information for congruence.
3. Information about installation obtained from field observations.
4. Decide if program is congruent with standards.
5. If program is not congruent, why has the program not been installed?
6. Model of program installation procedure.
7. Description of actual installation procedure used.
8. Decide where procedural breakdown exists.
9. What should be done to install the program?
10. Alternative installation strategies of a general nature.
11. Information about operational constraints on alternative strategies.

12. Select possible specific strategies.

13. What strategy is best?

14. Value priorities of the decision-maker.

15. Estimates of the actual value consequences of each workable strategy.

16. Selection of that strategy which optimizes values.

17. Is the program achieving its enabling objectives?

18. Discrepancy information based on actual program performance of students. Yes, No. If not, why not?

19. Description of breakdown points.

20. What corrective alternatives appear possible under the model?

21. Create solution-set alternatives possible within the problem field.

22. Detailed analysis of actual constraints in the problem field.

23. Choose from among them the set which meets field requirements.

24. What corrective alternative appears best?

25. Information describing value consequences of alternatives.

26. Is the corrective action adequately defined?

27. Model of corrective action, definition-adequacy criteria.

28. Information descriptive of existing corrective action definition.

29. Determine if corrective action is adequate in terms of the model. If not, why not?

30. Identify definition process actually used.

31. Describe points at which the definition process has broken down.

32. What corrective alternatives appear possible under the model?

33. Create solution-set alternatives.

34. Detailed description-analysis of problem field based on problem-solving model.

35. Choose from among them that set which satisfied field demands.

36. What corrective alternative appears best?

37. Choose alternative with best value-configuration fit.

38. Is the corrective action installed?

39. Model of corrective action derived from definition of corrective action.

40. Information descriptive of actual field conditions.

41. Determine if congruence exists.

42. If discrepancy, why? (If not, why not?)

43. Identify breakdown points (actual vs. model discrepancies).

Generally the Evaluation Team will consist of:

1. Several non-directive evaluation specialists skilled in small-group process work and ethnological techniques, each of whom has responsibility for project-evaluation management but all of whom may team up to facilitate group work.

2. One or more psychometrists familiar with a wide range of group cognitive and affective instruments and capable of rapidly designing ad hoc instruments.

3. A research-design specialist capable of drawing carefully defined samples, designing experiments, and directing the statistical analysis of data.

4. One or more technical writers familiar with educational "language" and evaluation concepts.

5. A data-processing unit with the capacity for data storage, retrieval, and statistical analysis as directed.

6. Subject-specialist consultants.

7. A status figure capable of communicating directly with the superintendent of schools and all program directors.

The following table depicts activities of the Evaluation Team as they might relate to the activity of a program staff.

Table I.

Relation of Activities of the Evaluation and Program Staffs

Evaluation-Staff Activity	Program-Staff Activity
Identify decision points in the entire evaluation process. Establish and maintain an apparatus whereby staff may formulate standards.	
	Identify standards. Find ways in which to work with staff to reformulate standards if necessary.
Insure the adequacy of standards through the application of explicit criteria.	
	Find ways to resolve differences in standards used by the program staff.
Communicate statement of standards to staff.	
Identify information needed to compare performance with standards. Design a method of obtaining program-performance information.	Identify information available or attainable in order to compare performance with standards.
	Provide information descriptive of program performance.
Report standards vs. performance discrepancy.	
	Choose between action alternatives in regard to discrepancy.
Identify decision points in the problem-solving process.	
	Identify kind of information needed to identify cause of program-performance deficiency.
Locate information as to cause of program-performance deficiency. Identify decision points in choosing criteria to be used for selecting "possible" and "best" corrective alternatives.	

	Explicate the criteria used to identify cause of discrepancy. Identify available corrective alternatives. Identify information needed to generate alternatives.
Locate and synthesize information as requested.	Identify criteria underlying choice of best alternative. Choose "best" alternative for corrective action.

In order to evaluate, the team will gather together certain data. The data are likely to be from several quite different sources, gathered in several quite different ways. Whether the immediate purpose is description or judgment, three bodies of information should be tapped. In the evaluation report it will be helpful to distinguish between antecedent, transaction, and outcome data.

The evaluation team will develop Data Matrices. Data will be recorded on a descriptive matrix and a judgment matrix. The evaluation team will collect data related to the contingencies between antecedents, transactions and outcomes. These data will be recorded in terms of description and judgment. Descriptions will involve "intents" and "observations" and the congruency between them. Judgment will involve general standards of quality and specific judgments.

CHAPTER V

DISTRICT REORGANIZATION FOR IMPLEMENTATION OF EVALUATION MODEL

In order to implement the preceding evaluation model it was necessary to reorganize the administrative structure and functioning of the subject school district. In response to budget limitations as well as to the need to gain available internal expertise and involvement of the existing staff in the evaluation model there was a philosophical switch from centralized toward decentralized organizational decision-making.

Prior to the introduction of this model to the administration of the City School District of New Rochelle, the table of organization resembled that of most school districts of comparable size in the northeast region of the country. The Superintendent headed an administrative team of assistants, directors and supervisors whose centralized authority extended into all phases and divisions of the district's operation. A schematic of that organization looked like this:

Figure [illegible].

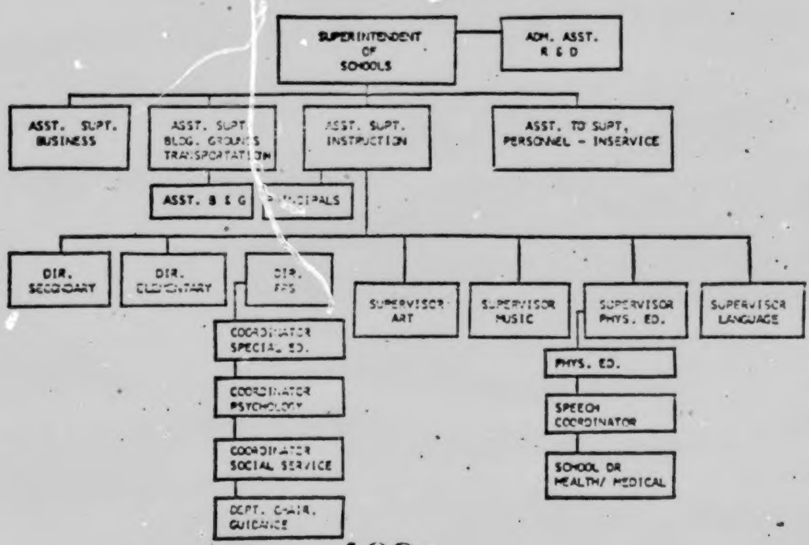
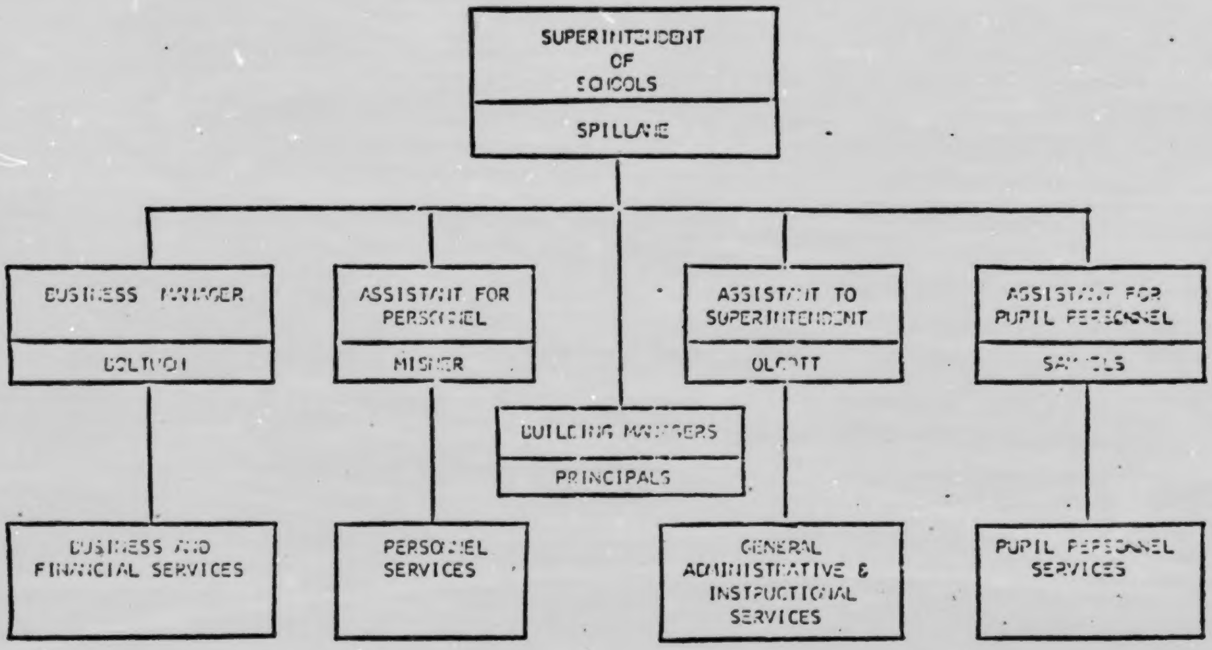

SUPERINTENDENT OF SCHOOLS
ADM. ASST. R & D
ASST. SUPT. BUSINESS
ASST. SUPT. BLDG. GROUNDS TRANSPORTATION
ASST. SUPT. INSTRUCTION
ASST. TO SUPT, PERSONNEL - INSERVICE
ASST. B & G
PRINCIPALS
DIR. SECONDARY
DIR. ELEMENTARY
DIR. PPS
COORDINATOR SPECIAL ED.
COORDINATOR PSYCHOLOGY
COORDINATOR SOCIAL SERVICE
DEPT. CHAIR. GUIDANCE
SUPERVISOR ART
SUPERVISOR MUSIC
SUPERVISOR PHYS. ED.
SUPERVISOR LANGUAGE
PHYS. ED.
SPEECH COORDINATOR
SCHOOL DR HEALTH/ MEDICAL

Table of Organization Prior to Evaluation Redesign

In the reorganization the central administration was streamlined, as a first step, dividing the major areas of the district's operation into four parts. Figure 12 describes this organizational structure following the reorganization design.

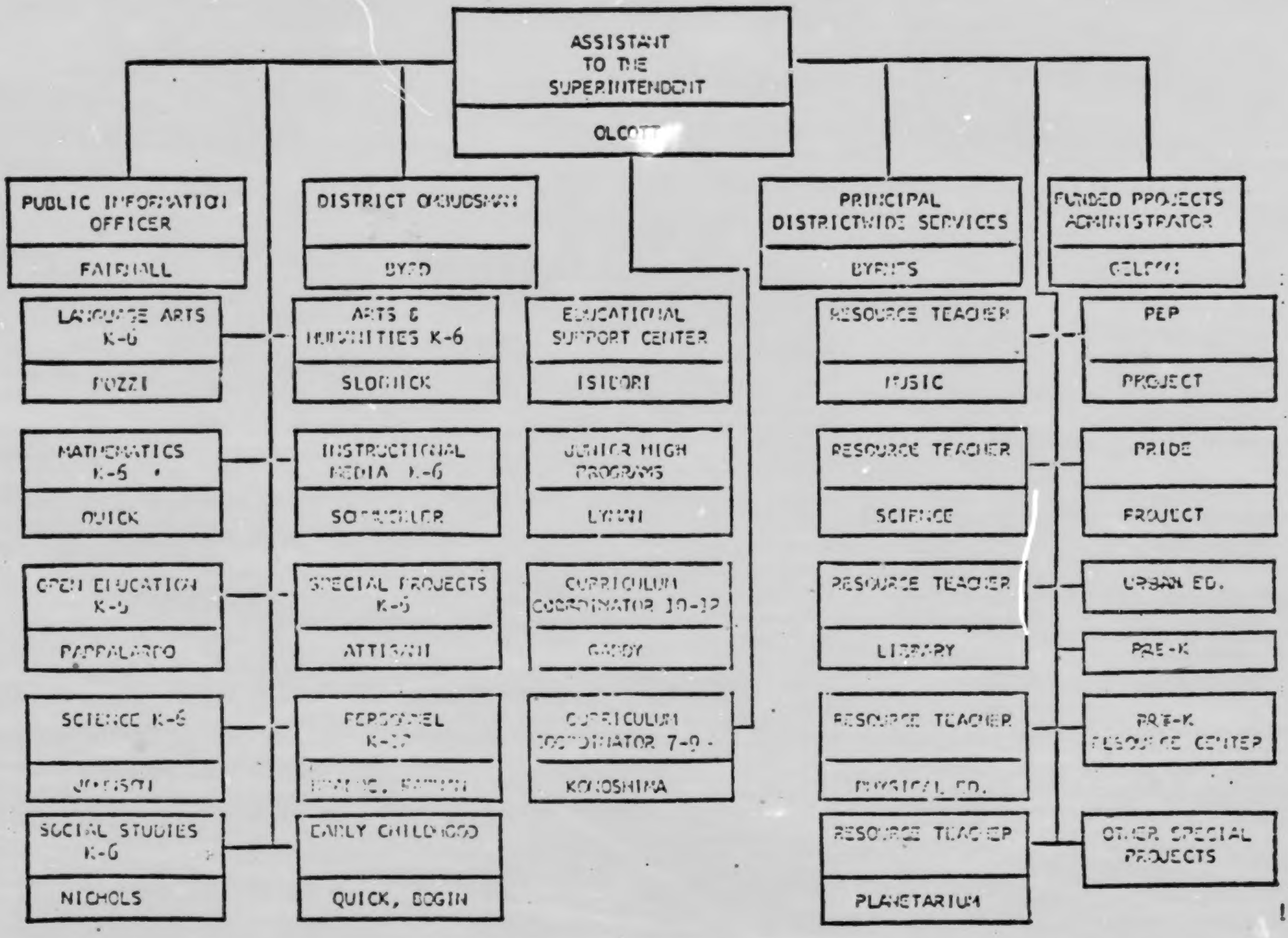
Figure 12.


SUPERINTENDENT OF SCHOOLS
SPILLANE
BUSINESS MANAGER
BOLTON
ASSISTANT FOR PERSONNEL
MISNER
ASSISTANT TO SUPERINTENDENT
OLCOTT
ASSISTANT FOR PUPIL PERSONNEL
SAMUELS
BUILDING MANAGERS
PRINCIPALS
BUSINESS AND FINANCIAL SERVICES
PERSONNEL SERVICES
GENERAL ADMINISTRATIVE & INSTRUCTIONAL SERVICES
PUPIL PERSONNEL SERVICES

Central Administration

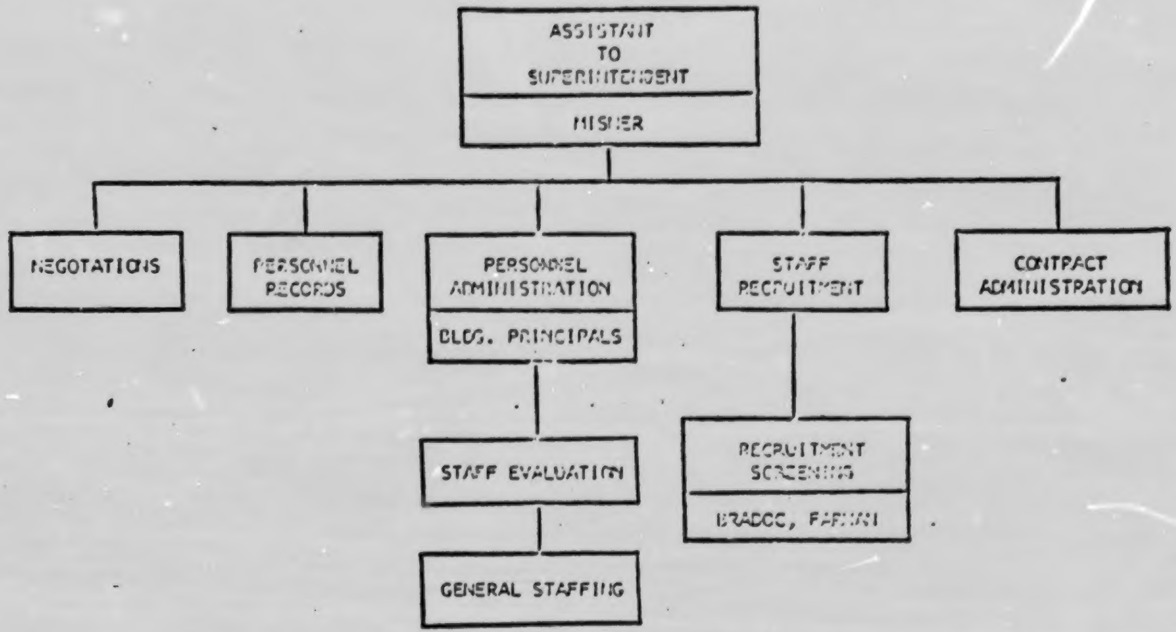
As a next step, workshops were held with the administrative staff including the Superintendent of Schools. The entire staff was in agreement with the proposed evaluation model and with their involvement through taking on district-wide areas of responsibility in their areas of expertise. The following tables describe the new organizational structure for administrative staff. Their specific areas are listed as they relate to decision-making, accountability and evaluation.

Figure 13.


ASSISTANT TO THE SUPERINTENDENT
OLCOTT
PUBLIC INFORMATION OFFICER
FAIRHALL
DISTRICT OMBUDSMAN
BYRD
PRINCIPAL DISTRICTWIDE SERVICES
BYRNES
FUNDED PROJECTS ADMINISTRATOR
[illegible]
LANGUAGE ARTS K-6
POZZI
ARTS & HUMANITIES K-6
SLOMNICK
EDUCATIONAL SUPPORT CENTER
ISIDORI
RESOURCE TEACHER
MUSIC
PEP
PROJECT
MATHEMATICS K-6
QUICK
INSTRUCTIONAL MEDIA K-6
[illegible]
JUNIOR HIGH PROGRAMS
LYNN
RESOURCE TEACHER
SCIENCE
PRIDE
PROJECT
OPEN EDUCATION K-6
PAPPALARDO
SPECIAL PROJECTS K-6
ATTISANI
CURRICULUM COORDINATOR 10-12
GADDY
RESOURCE TEACHER
LIBRARY
URBAN ED.
PRE-K
SCIENCE K-6
JOHNSON
PERSONNEL K-12
[illegible]
CURRICULUM COORDINATOR 7-9
KONOSHIMA
RESOURCE TEACHER
PHYSICAL ED.
PRE-K RESOURCE CENTER
SOCIAL STUDIES K-6
NICHOLS
EARLY CHILDHOOD
QUICK, BOGIN
RESOURCE TEACHER
PLANETARIUM
OTHER SPECIAL PROJECTS

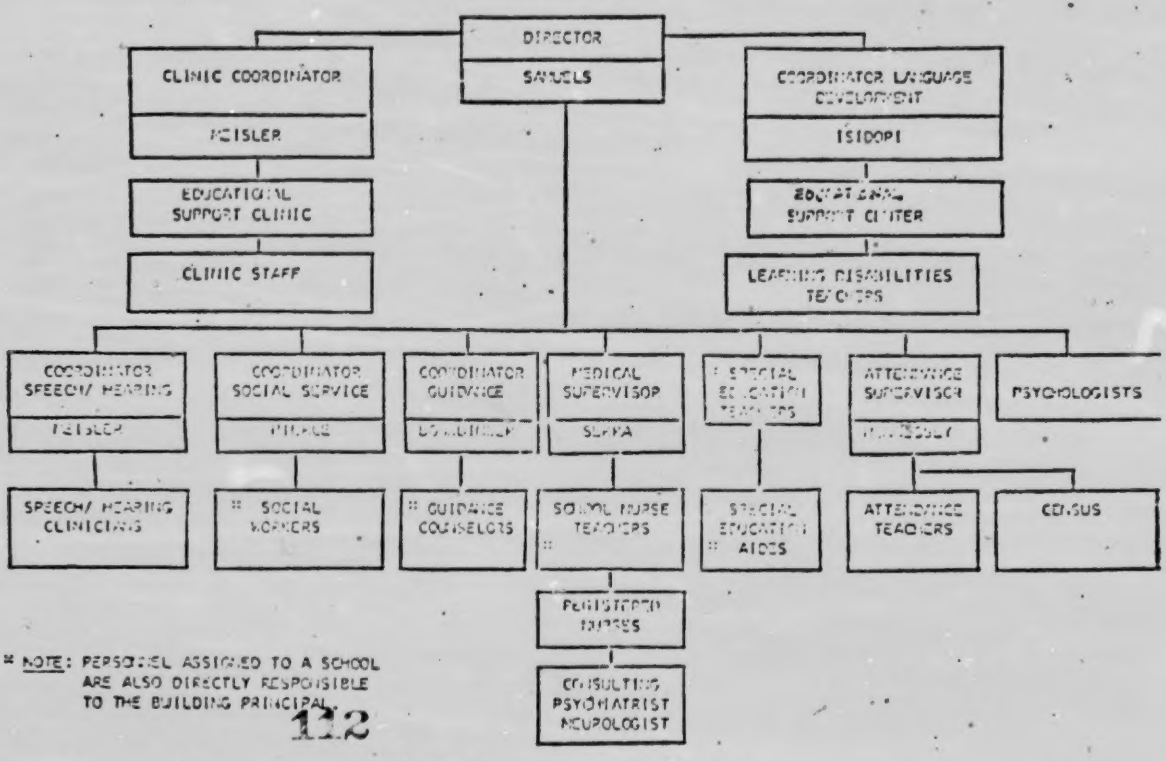
General Administrative & Instructional Services

Figure 14.


ASSISTANT TO SUPERINTENDENT
MISLER
NEGOTATIONS
PERSONNEL RECORDS
PERSONNEL ADMINISTRATION
BLDG. PRINCIPALS
STAFF RECRUITMENT
CONTRACT ADMINISTRATION
STAFF EVALUATION
GENERAL STAFFING
RECRUITMENT SCREENING
BRADOC, FARMAN

Personnel Services

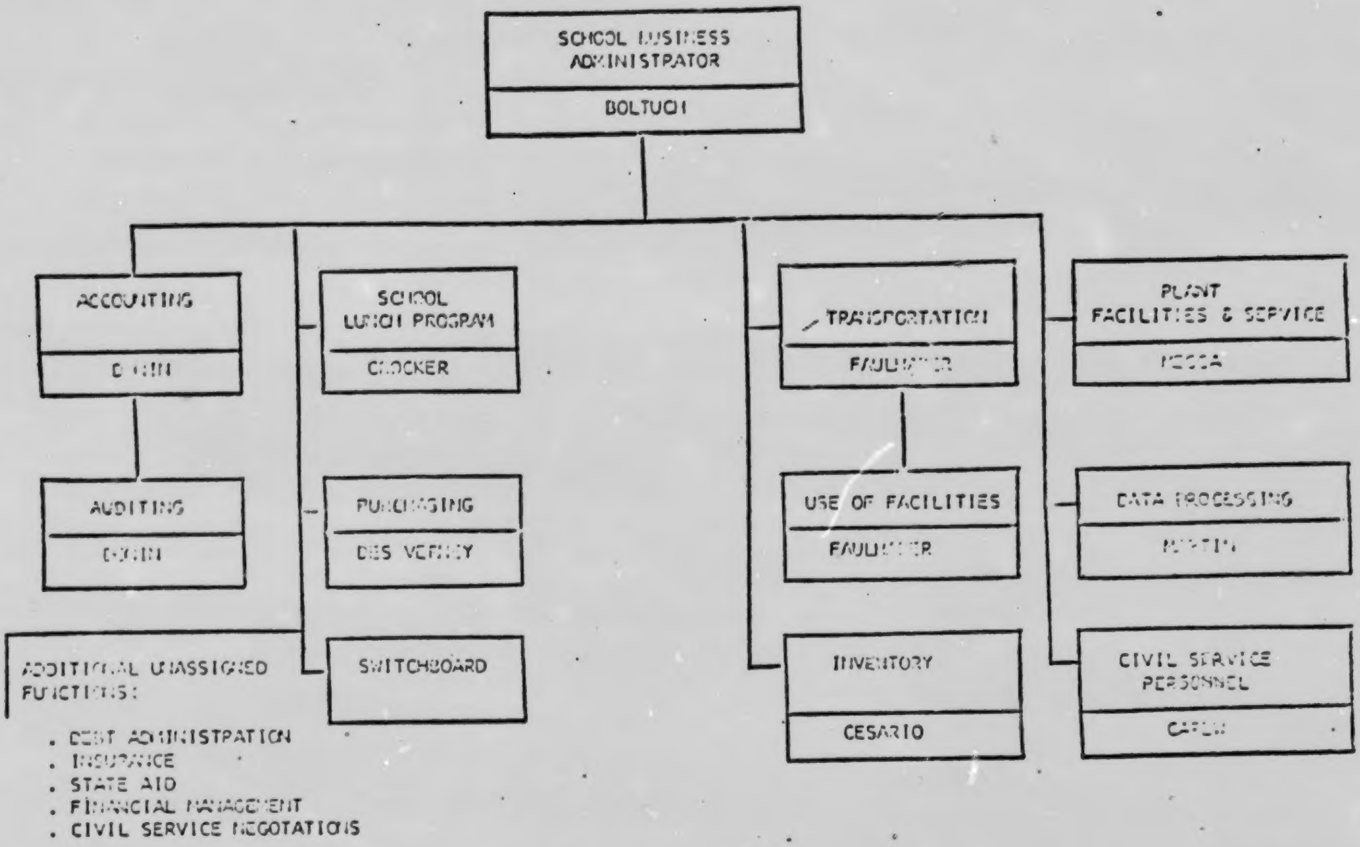
Figure 15.


DIRECTOR
SAMUELS
CLINIC COORDINATOR
MEISLER
EDUCATIONAL SUPPORT CLINIC
CLINIC STAFF
COORDINATOR LANGUAGE DEVELOPMENT
ISIDORI
EDUCATIONAL SUPPORT CENTER
LEARNING DISABILITIES TEACHERS
COORDINATOR SPEECH/ HEARING
MEISLER
COORDINATOR SOCIAL SERVICE
COORDINATOR GUIDANCE
MEDICAL SUPERVISOR
SERPA
* SPECIAL EDUCATION TEACHERS
ATTENDANCE SUPERVISOR
PSYCHOLOGISTS
SPEECH/ HEARING CLINICIANS
* SOCIAL WORKERS
* GUIDANCE COUNSELORS
SCHOOL NURSE TEACHERS *
SPECIAL EDUCATION * AIDES
ATTENDANCE TEACHERS
CENSUS
REGISTERED NURSES
CONSULTING PSYCHIATRIST NEUROLOGIST

* NOTE: PERSONNEL ASSIGNED TO A SCHOOL ARE ALSO DIRECTLY RESPONSIBLE TO THE BUILDING PRINCIPAL.

Pupil Personnel Services

Figure 16.


SCHOOL BUSINESS ADMINISTRATOR
BOLTUCH
ACCOUNTING
DUNN
AUDITING
DUNN
ADDITIONAL UNASSIGNED FUNCTIONS:
. DEBT ADMINISTRATION
. INSURANCE
. STATE AID
. FINANCIAL MANAGEMENT
. CIVIL SERVICE NEGOTATIONS
SCHOOL LUNCH PROGRAM
CLOCKER
PURCHASING
DES VERNEY
SWITCHBOARD
TRANSPORTATION
FAULKNER
USE OF FACILITIES
FAULKNER
INVENTORY
CESARIO
PLANT FACILITIES & SERVICE
DATA PROCESSING
MARTIN
CIVIL SERVICE PERSONNEL

Business & Financial Services

A review of the foregoing tables indicates the limits to which the district has gone to decentralize its operation and assign specific areas of function and responsibility to individual administrators. Notice, for instance, how in Figure 13 the entire instructional program of the district, in regular and special program areas, has been broken up into discrete parts with a single individual in charge of each. It should be stated that the new organization was designed, at least in part, to satisfy a need for greater accountability. It also provided the framework for making the evaluation model operational.

Within the prior organizational structure there did not exist any Evaluation Department. Most of what passed for evaluation or research was directed by the Director of Pupil Personnel Services. This office basically directed a district-wide testing program, and prepared statistical reports.

In order to coordinate the district-wide evaluation model and direct the newly developed decentralized organizational structure a Department of Evaluation was developed. Basically the following organizational structure was adopted and approved by the Superintendent and Board of Education.

Figure 17.

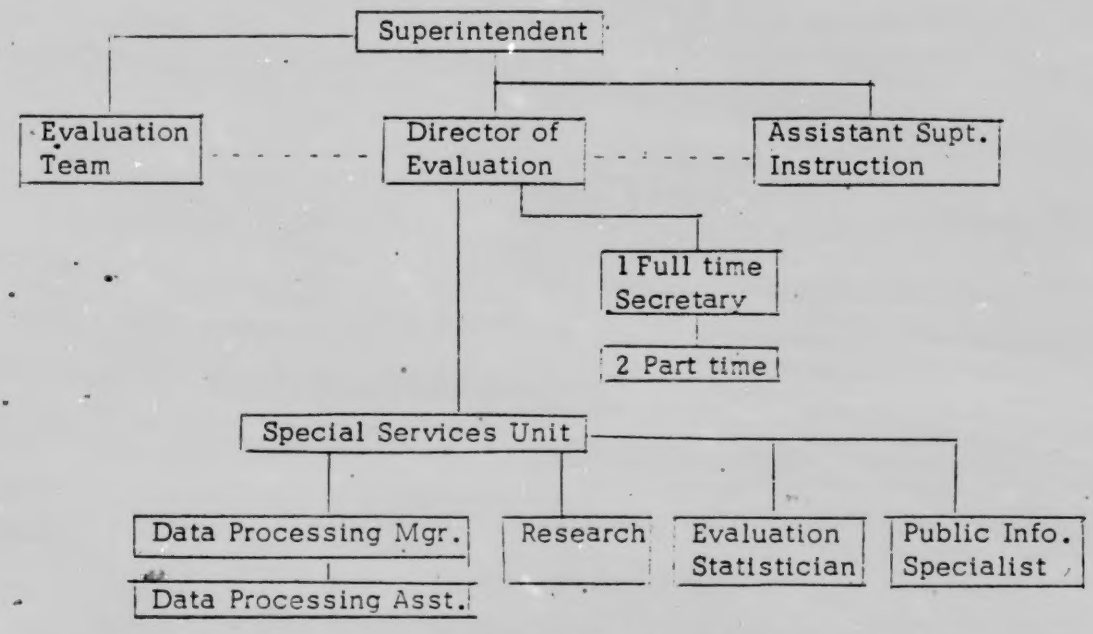

Superintendent
Evaluation Team
Director of Evaluation
Assistant Supt. Instruction
1 Full time Secretary
2 Part time
Special Services Unit
Data Processing Mgr.
Data Processing Asst.
Research
Evaluation Statistician
Public Info. Specialist

Table of Organization for Evaluation Services

The Evaluation Model had to be implemented - as it had been designed - in the following context: No new professional positions were to be created for the purpose of Evaluation. The Evaluation Program would have to be conducted by members of the existing professional staff assisted by clerical personnel who were being made available. This was not conceived to be an imposition of additional work for existing staff; rather it was a reorganization of function which would thereafter undertake any formal evaluation.

The direction of the evaluation, however, would be assumed by the Director of Pupil Personnel Services. The other department would join in the effort, principally with those of Instruction, Data Processing and Public Information to carry on the various aspects of the Evaluation Model.

Additional clerical staff would be added to handle the necessary record keeping, tabulation and reporting of data collected in connection with this work and funds in the amount of $40,000 would be reallocated within the district's operating budget to support those activities.

Information would be collected by the Evaluation Department stating all the following persons (a job description of each member of the department is supplied).

1. Director of Evaluation (also Director of Pupil Personnel Services and head of Evaluation Team)
2. Evaluator-Statistician
3. Program Evaluation Supervisor (also Assistant Superintendent for Instruction)
4. Research Psychologist
5. Graduate Intern
6. Public Information Specialist

Their function as a department is as follows:

1. To describe and evaluate the effectiveness of selected educational programs funded from local, state, and federal sources and administered by the school district.
2. To provide information on the overall performance of schools in relation to systemwide objectives.
3. To design and manage the systematic collection, storage, retrieval, and dissemination of data.
4. To maintain and disseminate information on exemplary and innovative practices in education.
5. To provide consulting services in research, assessment, and evaluation for teachers, principals, project directors, and central office administrators.
6. To promote and encourage the use of the assessment, research, and evaluation capabilities of the district.
7. To provide at the direction of the director such information as is deemed necessary to conduct formative or summative evaluation of any program within the system.

The Evaluation Team consists of the Director of Pupil Personnel Services, the Assistant Superintendent for Instruction, an Elementary Principal with some background in curriculum development, a secondary school Department Chairman with a strength in Research and Statistics, and a central administrator with a background in Special Education.

The descriptions of the roles of these individuals as members of the Evaluation department are as follows:

JOB DESCRIPTIONS

Position Title: Director of Evaluation

Responsible to: Superintendent of Schools

Primary Functions:

The Director of Evaluation shall be responsible for all matters relating to evaluation in the New Rochelle Public Schools. He shall serve as the leader of the evaluation department.

Major Responsibilities:

1. Promotes and encourages the use of evaluation in education programs
2. Controls the operation of the evaluation department
3. Coordinates activities of the evaluation department with other information gathering services used by the school system
4. Provides training in evaluation to evaluation department staff members and the use of evaluation information to other members of the school system staff
5. Serves in other areas as directed by the Superintendent

Illustration of Key Duties:

1. Facilitating the use of evaluation in educational programs
    a. Identifying decision makers to be served and projecting decision situations to be served by evaluation
    b. Inviting various personnel to participate actively in evaluation to the degree specified in policies for evaluation
    c. Establishing rapport with participants in programs to be evaluated
    d. Identifying and stating the purposes for evaluation in specified programs
    e. Preparing and distributing information about the operation and capabilities of the evaluation department
    f. Working with other administrators to identify and disseminate the capabilities of evaluation for serving the school personnel and the community

   g. Searching for new areas of the educational program for which evaluation would be useful and identifying sources of financial and human resources for expanding the evaluation program.

2. Controlling the operations of the evaluation department

   a. Assigning evaluation tasks to department personnel

   b. Reviewing designs, instruments, and reports

   c. Reviewing staff and resource requirements and projecting those requirements into the future in order to plan and budget for evaluation activities

   d. Working with administrators to write evaluation selections of proposals

   e. Approving evaluation activities contracted with other agencies

   f. Arranging for internal evaluation of department activities and evaluation personnel

3. Coordinating evaluation services

   a. Coordinating evaluation activities within the evaluation department and other departments

   b. Working cooperatively with other administrators responsible for information gathering to insure compatibility of information forms and data handling procedures

4. Providing training

   a. Arranging and supervising training of evaluation department personnel

   b. Arranging for inservice training of professional staff members in conducting individual evaluation activities

   c. Providing inservice education programs and conducting workshops to enable decision makers to use evaluation findings as the basis for decision making

   d. Identifying further areas of training in evaluation needed by professional personnel (such as training in program evaluation and review techniques for proposal writers), and arranging for such training programs.

5. Serve in other areas as directed by the Superintendent

Position Title: Supervisor of Research Services (Evaluator-Statistician)

Responsible to: Director of Evaluation

Primary Functions:

1. To administer the institutional research activities of the department
2. To administer the information systems program for the department
3. To provide relevant information to program developers to assist in the planning process
4. To promote the use of research information

Illustration of Key Duties:

1. To administer the institutional research activities of the department
    a. Supervise the long- and short-range planning activities for research services
    b. Supervise and manage the steps involved in planning and conducting a research study, i.e., problem identification, research design formulation, data collection, analysis methodology, and information reporting
    c. Supervise and evaluate staff assigned to the research unit
    d. Plan and administer the fiscal resources for research services
    e. Cooperate with the department director and other unit supervisors to coordinate the work performed by the department
    f. Assist the Director in the formulation of policies and procedures governing the operation of research services
2. To administer the information systems program for the department
    a. Supervise the development and implementation of a data collection, storage and retrieval system for the department
    b. In support of the evaluation division, design and implement an information system which will report student progress toward interim and final project objectives
    c. Administer the needs assessment mechanism for the system, e.g., student surveys, dropout study, follow-up study, building profiles, and educational audits, etc.

3. To provide relevant information to program developers to assist in the planning process

    a. Supervise the maintenance and development of the innovative practices bank and department library

    b. Supervise the review of programs, method and strategies according to the criteria provided by the program developers

    c. Conduct reviews of the literature

    d. Serve as resource person on matters related to decision making and planning strategies, i.e., Delphi Technique, PERT, and advocate-team techniques

4. To promote the use of research information

    a. Provide inservice for department and other professional staff members related to the design, collection, analysis, and use of research information

    b. Screen proposed research activity requests from external agencies

    c. Serve as resource person for the district on matters pertaining to research design

    d. Maintain liaison with other educational research institutions and projects

Position Title: Supervisor of Program Evaluation (Assistant Superintendent for Instruction)

Responsible to: Director of Evaluation (In Evaluation only)

Primary Functions:

The Supervisor of Program Evaluation shall be responsible for designing and coordinating the implementation of designated evaluation activities. He shall direct evaluation projects which fall into the purview of the program evaluation division.

Major Responsibilities:

1. Focusing on evaluation information to be provided
2. Designing information collection, organization, and analysis procedures
3. Reporting evaluation information
4. Administrating designated evaluation services

Illustration of Key Duties:

1. Focusing on evaluation information to be provided
    a. Working with administrators and the Director of Evaluation to make explicit assumptions of the project to be evaluated and to check the validity of those assumptions
    b. Restructuring objectives or information to be gathered into measurable form and outlining variables and criteria for measurement
    c. Identifying additional information to be gathered and the time by which that information must be provided to be useful
    d. Working with administrators to identify audiences for evaluation information and specifying means for providing appropriate information to them at the time that information is needed
    e. Summarizing policy considerations which will guide the operation of evaluation activities

2. Designing information collection, organization, and analysis procedures
    a. Verifying sources of information to be gathered
    b. In cooperation with other evaluation personnel, developing specifications for evaluation instruments and selecting or constructing appropriate instruments for data collection
    c. Defining procedures for administration (including sampling procedures to be employed and scheduling of information collection)
    d. Supervise the coding and organizing of gathered information
    e. Selecting statistical or other analystical procedures for performing data analysis and designing a means for performing the analysis
    f. Working cooperatively with other school personnel who provide data processing services as needed to complete evaluation activities
3. Reporting evaluation information
    a. Determining audiences and estimated deadlines for evaluation reports
    b. Specifying means for providing appropriate information and format for evaluation reports
    c. Scheduling reporting of information to professional and lay audiences
    d. Presenting evaluation information to professional and lay audiences
4. Administrating designated program evaluation services
    a. Monitoring budgets and schedules of evaluation activities
    b. Insuring the smooth flow of evaluation information to identified decision makers
    c. Maintaining smooth working relationships with persons providing and obtaining evaluation information and following accepted school system protocol
    d. Supervise and evaluate staff assigned to unit

Position Title: Supervisor of Assessment Services (Research Psychologist)

Responsible to: Director of Evaluation

Primary Functions:

The Supervisor of Assessment shall be responsible for the development, implementation, and supervision of the district's norm-referenced and criterion-referenced testing program.

Major Responsibilities:

1. Supervise the district's norm-referenced and criterion-referenced testing program
2. Identify, screen, and file available instruments
3. Select and/or develop tests and other measurement instruments to be employed by the department

Illustration of Key Duties:

1. Supervise the district's norm-referenced and criterion-referenced testing program
    a. In cooperation with the Director of Evaluation and other school personnel, design and schedule the assessment program for the school district
    b. Provide inservice training in the administration, utilization, and interpretation of testing instruments
    c. Provide testing instruments to meet specialized needs of professional personnel for individual or group diagnosis and assessment
    d. Provide for pilot testing of instruments before they are employed in ongoing projects
    e. Review the current literature on instrumentation and keep the staff abreast of latest developments in the field
    f. Supervise and evaluate staff assigned to unit

2. Identify, screen, and file instruments

    a. Identify criteria for instrument selection and establish procedures for screening instruments

    b. Provide for the procurement of appropriate quantities of tests and testing materials to meet the needs of the system

    c. Develop and maintain records of the use, strengths, and weaknesses of available instruments

    d. Create a complete file of commercially supplied and locally constructed instruments and collect data on their applicability to departmental efforts

3. Select and/or develop tests and other measurement instruments to be employed by the department

    a. Select or create instruments needed for research and evaluation activities

    b. Write and/or supervise the writing of acceptable items for instruments

    c. Prepare and/or supervise the preparation of directions for administering and scoring all instruments

Position Title: Research Assistant (Graduate student)

Responsible To: Director of Evaluation (or his designee)

Primary Functions:

The research assistant shall be responsible for assisting in the data collection, data processing, and reporting activities of the department

Major Responsibilities:

1. Data Collection and instrument development
2. Data analysis and reporting
3. Data processing functions
4. Other departmental activities

Illustration of Key Duties:

1. Data collection and instrument development
    a. Collecting data as specified in research and evaluation designs
    b. Provide assistance in selecting samples for studies and surveys
    c. Provide assistance in implementing research and evaluation designs
    d. Assist in the development and field testing of instruments, i.e. criterion-referenced tests and questionnaires
2. Data analysis and reporting
    a. Assist in planning research, evaluation or assessment project, i.e., PERT, flow charting, task analysis
    b. Specify methods for collecting data
    c. Determine format and code data in a form useful for analysis purposes
    d. Train paraprofessionals to gather and organize data

- e. Use analytical techniques and available hand and machine data processing devices to analyze information
- f. Prepare graphs, charts and tables to illustrate technical reports
- g. Report writing

3. Data processing functions
    - a. Provide assistance in coordinating departmental activities with data processing personnel
    - b. Provide a format for coding data
    - c. Interpret computer printouts
4. Assist in all phases of departmental activities
    - a. Prepare reviews of literature
    - b. Keep abreast of developments in the field of research, evaluation and assessment

Position Title: Public Information Specialist

Responsible to: Director of Evaluation (or his designee)

Primary Functions:

The Public Information Specialist is responsible for providing oral and written dissemination of departmental reports to persons both within and outside the school system.

Major Responsibilities:

1. Disseminate information concerning departmental activities to outside groups through the use of written, oral, and visual communication
2. Prepare reviews of literature
3. Undertake other communication projects as needed.

Illustration of Key Duties:

1. Preparing departmental reports
    a. Develop and disseminate clear and concise departmental reports
    b. Assist other departmental personnel in writing and editing their manuscripts
    c. Specify the audiences to receive departmental reports based upon information provided by the director of evaluation
    d. Provide abstracts of departmental reports for presentation to specific groups
    e. Analyze the information requirements and reading levels of various audiences for evaluation reports
    f. Prepare findings and recommendations in a variety of interesting and understandable forms, such as: written reports, video tapes, wall charts, and overhead transparencies
    g. Describe the effect of different media on the message to be communicated
    h. Obtain recipient's reactions to reports

2. Conduct reviews of literature
    a. Determine specific areas of the topic to be covered
    b. Identify sources of literature
    c. Synthesize and write the review
    d. Disseminate review to the appropriate audiences
3. Disseminate information about departmental activities
    a. Design and write a periodic departmental newsletter
    b. Promote better communication and understanding between outside audiences and the department
    c. Develop and implement a system for continually informing system personnel and the community about the work of the department
    d. Prepare an annual report on departmental activities, which includes the goals, services, and overall activities of the evaluation department
4. Undertake other departmental projects
    a. Prepare articles for outside publications
    b. Provide technical communication assistance to other professionals within the system

CHAPTER VI

EVALUATION IN-SERVICE

District staff were involved in Evaluation In-Service programs designed to acquaint them with the definition of evaluation and the rationale for an evaluation program in the school district.

Participants in the Evaluation In-Service were made aware of the evaluation types and the relationship of these types to decision making.

Specific areas covered in the in-service included:

1. The New Rochelle Model
2. Focusing the evaluation
3. Collection of information
4. Organization of information
5. Analysis of information
6. Reporting of information
7. Administration of the evaluation

Participants were made aware of the interface relationship between evaluation and decision making and were exposed to evaluation and decision-maker responsibilities in the delineating, obtaining, and providing information for context, input, process and product evaluations.

Participants were shown the relationship between decision making and accountability.

Also they were exposed to the methodology of evaluation and tasks for:

1. Preparation of reports
2. Analysis of data

3. Organizing data
4. Statement of evaluation policies
5. Statement of evaluation assumptions
6. Specification of decisions

Audio-Visual materials developed for these in-service programs are to be found listed in Appendix B and are available in a supplement to this report. Additional in-service materials used included programmed test questions, developed by staff, and are to be found in the following pages.

IN-SERVICE MATERIALS

This section contains objective questions and keyed responses to questions relating to New Rochelle's Evaluation Model. These assisted the workshop participants in determining whether they had achieved the objectives for this training. Each question appeared on a separate page in the training sessions and was followed on the subsequent page by a presentation and discussion of the correct and incorrect responses. In addition practical exercises were presented. In the interest of conserving space these appear continuously below and not on separate pages as in the training sessions.

Question 1.

Which of the following is the most unique characteristic of the CIPP Model?

a. It focuses on providing information for the major types of educational decisions.

b. It considers the unmet needs of the school system.

c. It evaluates outcomes in terms of their behaviorally stated objectives.

d. It emphasized the role of the evaluator as decision maker.

(After you have circled what you consider the correct response turn the page to check your answer.)

Key for Question 1.

(Correct Response)

You should have circled "a"

The most unique characteristic of the CIPP Model is that "it focuses on providing information for major types of educational decisions."

This is correct because CIPP's main departure from classical evaluation theory is to require that evaluation provide timely information for decision making.

(Incorrect Responses)

"b" is not the best response because it focuses on only one type of information that is gathered through use of the CIPP Model.

"c" is incorrect because it denotes the main feature of the Tylerian approach, which does not focus on decision making.

"d" is incorrect because CIPP distinguishes sharply between the roles of evaluator and decision maker.

Question 2.

Which of the following is not a potential advantage of equating evaluation to measurement?

a. In the measurement approach, evaluation reports are based upon objective data.

b. Data obtained under measurement approach to evaluation usually meet the assumptions required for interval and ordinal scales.

c. Under the measurement approach, most variables of interest can be considered in the evaluation.

d. The task of developing objective bases for judging program or pupil performance is quite feasible.

Key for Question 2.

(Correct Response)

You should have chosen "c"

It is not a main advantage of the measurement approach that most variables of interest can be considered in the evaluation.

This is so because the measurement approach directs educators to use available tests that have been carefully validated. By following this advice the evaluator cannot consider many variable for which tests have not been developed.

(Incorrect Responses)

"a" is an advantage of equating evaluation to measurement because the measurement approach offers sound procedures for objectivity in administering and scoring tests.

"b" is also an advantage because the measurement approach is based on methods that strive toward meeting the requirements of ordinal and interval scales.

"d" is also an advantage because objective tests have been used widely to provide information for judging both pupil and program performance.

Question 3.

Which of the following is a likely consequence of equating evaluation to experimental design?

a. Projects being evaluated will be modified and refined frequently based on continual feedback from the evaluation.

b. The evaluation will provide explicitly for the assessment of project goals.

c. The evaluation will provide in depth case study findings concerning the operation of a single project design.

d. The evaluation will provide relatively unequivocal findings concerning the relative performance of competing project designs.

Key to Question 3.

(Correct Response)

You should have responded "d"

Experimental design is a direct approach to determine and compare the effects of alternative procedures.

(Incorrect Responses)

"a" is incorrect because experimental design requires that treatments be held constant during the period of the experiment and because experiments provide findings only at the end of the study.

"b" is incorrect because experimental design does not provide for performing needs assessment or in any other way judging goals.

"c" is incorrect because experimental design focuses on more than one treatment and assesses product as opposed to process.

Question 4.

Which of the following best illustrates the difficulties associated with equating evaluation to professional judgment ?

a. In this approach evaluators are not restricted in the variables they may consider in assessing the merit of a program, and they may consider variables for which no valid measuring devices exist.

b. This approach provides only a flimsy data base for the professional judgments that are rendered, and these are notoriously unreliable.

c. This approach lacks independence since the evaluators who make the professional judgments usually are the persons who are in charge of the programs being evaluated.

d. This approach is excessively expensive, in terms of both time and money.

Key for Question 4.

(Correct Response)

You should have circled "b"

The Professional judgment approach to evaluation provides only a flimsy data base for the professional judgments that are rendered and these are notoriously unreliable.

This has been borne out in many studies of the interjudge reliability of project review panels and doctoral examination committees.

(Incorrect Responses)

"a" is incorrect because not being restricted to variables for which valid measures exist potentially enhances the validity of the study, since all relevant variables may be considered in arriving at judgments.

"c" is not correct because the professional judgment approach does utilize outside, independent judges.

"d" is not correct because the professional judgment approach actually is cheaper and less time consuming than most other evaluation approaches.

Question 5.

Which of the following best characterizes the levels problem?

a. Evaluators do not properly aggregate data gathered at a system's micro level so that these same data can be applied to assist decision making at the macro level of the system.

b. Evaluators do not determine what information is needed at each level of the system before designing their data gathering and analysis activities.

c. Evaluators do not control their evaluation reports for appropriate levels of readability.

d. Evaluators do not properly disaggregate data gathered at a system's macro level so that these same data can be used to answer specific questions at micro levels of the system.

Key for Question 5.

(Correct Response)

You should have responded "b"

The levels problem is that evaluators do not determine what information is needed at each level of the system before designing their data gathering and analysis activities.

Since information requirements vary significantly across system levels, evaluations designed to serve one level likely will not meet the needs of other levels.

(Incorrect Responses)

"a" is not correct because it assumes incorrectly that data gathered to serve the needs of the micro level of a system, is properly aggregated, will be sufficient to serve the needs of higher levels of the system.

"c" is incorrect because it denotes a different problem from what has been termed the levels program.

"d" is incorrect for two reasons. It assumes incorrectly that data gathered to serve one level of questions can be disaggregated to serve more specific questions. It also assumes incorrectly that the information requirements of a macro level encompass those of lower levels of the system.

Question 6.

Which of the following best represents the CIPP conception of the evaluation process?

a. Determine the operationally defined objectives, gather relevant outcome data, and compare outcomes with objectives.

b. Determine the questions to be answered, obtain relevant information, process and interpret the information, and provide feedback.

c. Describe the antecedents, monitor the transactions, measure the outcomes, and interpret the full set of information.

d. Focus the study, obtain appropriate information, evaluate the information, and select the best action alternatives.

Key for Question 6.

(Correct Response)

You should have answered "b".

The main steps in the CIPP-defined evaluation process are delineating, obtaining, and providing information.

These steps are best illustrated by the activities identified in "b".

(Incorrect Responses)

"a" is not correct because it illustrates the process that is recommended in the Tylerian approach.

"c" is not correct because it illustrates not CIPP, but some of the steps that are recommended by Stake in his Countenance Model.

"d" is not correct because it emphasizes Scriven's point that evaluators should decide what actions should be taken based on their evaluations.

Question 7.

Using the CIPP criteria cited for judging the worth of an evaluation study, which of the following statements best describes an adequate evaluation study?

a. It provides data which are unequivocal and which possess a high degree of generalizability.

b. It is generalizable to a specified set of conditions and a specified population of subjects.

c. It provides a relevant rationale for action choices which is timely, defensible, and efficient.

d. It provides information which is free from effects due to history, maturation of subjects, instrumentation, laboratory arrangements, and initial differences between comparison groups.

Key for Question 7.

(Correct Response)

You should have answered "c"

According to CIPP an adequate evaluation study should provide a relevant rationale for action choices which is timely, defensible, and efficient.

This is the best response because it denotes the need for sound evaluation studies to provide information that is technically adequate, useful and cost effective. These are the three main standards that CIPP prescribes for sound evaluation designs and reports.

(Incorrect Responses)

"a" is not correct because it is incomplete. It requires that evaluations be technically adequate but does not mention utility and cost/effectiveness.

"b" is incorrect because it is also incomplete. It requires only that evaluations be externally valid. It does not mention internal validity, utility or cost/effectiveness.

"d" is incorrect because it deals only with the internal validity portion of technical adequacy, and does not mention utility and cost/effectiveness.

Question 8.

According to the PDK book, decisions which specify procedure, personnel, facilities, budget, and time requirements are:

a. planning decisions

b. structuring decisions

c. implementing decisions

d. recycling decisions

Key for Question 8.

(Correct Response)

You should have answered "b"

Decisions which specify procedures, personnel, facilities, budget, and time requirements are structuring decisions.

This is consistent with the CIPP position that structuring decisions are those that specify what procedural design should be implemented to achieve given objectives.

(Incorrect Responses)

"a" is not correct because planning decisions specify not designs but objectives.

"c" is not correct because implementing decisions are those for carrying out chosen procedural designs.

"d" is not correct because recycling decisions are those based on the results of trying a given design and then deciding whether, and if so how, to continue using the design.

Question 9.

A decision which results in continuation of a project beyond its initial funding period is called a:

a. planning decision
b. recycling decision
c. continuation decision
d. implementing decision

Key for Question 9.

(Correct Response)

You should have answered "b"

Decisions which result in continuation (or termination) of projects beyond their initial funding periods in CIPP terminology are called recycling decisions.

(Incorrect Responses)

"a" is not correct because planning decisions are those that spell out the initial objectives of special projects and not the decisions that determine whether to terminate, modify, or continue the project after its implementation.

"c" is incorrect, a "continuation decision" is not one of the CIPP terms.

"d" is not correct because implementing decisions do not determine whether a project will be phased out or repeated. Instead implementing decisions concern how a project design is to be carried out.

Question 10.

According to CIPP evaluation theory, what kind of decision is designed to answer any combination of the following questions: Should the project staff be retrained? Should new procedures be instituted? Should the project schedule be modified?

a. structuring decision

b. planning decision

c. recycling decision

d. implementing decision

Key for Question 10.

(Correct Response)

You should have answered "d"

Decisions that involve the retraining of project staff, the instituting of new project procedures, and the modification of project schedules - according to the CIPP Model are Implementing decisions.

(Incorrect Responses)

"a" is not correct because structuring decisions specify initial project designs, whereas implementing decisions concern how the designs should be carried out.

"b" is incorrect because planning decisions spell out objectives and are not directly concerned with what procedures will be used to achieve the objectives.

"c" is incorrect because recycling decisions concern whether a project will be repeated and/or institutionalized, not how the project design is to be operationalized.

Question 11.

Based on a study of student needs, a school board decides to assign its highest priority to improving school services for children with learning disabilities. This is a:

a. planning decision

b. structuring decision

c. implementing decision

d. recycling decision

Key for Question 11.

(Correct Response)

You should have answered "a"

Decisions that determine goals, objectives, priorities, ends, etc. are planning decisions.

Ideally, planning decisions are based on context evaluations that reveal important needs.

(Incorrect Responses)

"b" is not correct because structuring decisions determine not what objectives should be served but how given objectives should be achieved.

"c" is incorrect because implementing decisions concern how to carry out a given project design to achieve given objectives.

"d" is incorrect because recycling decisions concern not what objectives should be pursued but whether a special project already instituted to achieve given objectives should be cancelled or continued.

Question 12.

The board of education of a large city school district requests assistance in determining the causes of the high dropout rate in their district. Select the most appropriate type of evaluation.

a. Context evaluation

b. Input evaluation

c. Process evaluation

d. Product evaluation

Key for Question 12.

(Correct Responses)

You should have answered "a"

Identifying needs and diagnosing their underlying causes are main functions of context evaluation.

Hence, context evaluation would be the appropriate way to determine the causes of a district's high dropout rate.

(Incorrect Responses)

"b" is incorrect because input evaluation assesses alternative responses to problems once they have been determined through context evaluation.

"c" is not correct because process evaluation assesses the implementation of a given strategy (identified through input evaluation) for solving given problems (diagnosed through context evaluation).

"d" is not correct because product evaluation assesses the results of a process that has been designed to solve certain problems. Hence, product evaluation in this case would assess the results of a special effort to reduce the dropout rate.

Question 13.

A school superintendent requests help in finding out whether a new language laboratory is being used in accordance with the specifications for its use. Which type of evaluation best responds to the superintendent's requests?

a. Context evaluation

b. Input evaluation

c. Process evaluation

d. Product evaluation

Key for Question 13.

(Correct Response)

You should have responded "c"

Process evaluations assess the extent to which designs actually are being carried out.

In this case process evaluation would assist the superintendent to identify any discrepancies between his district's actual and planned use of the language laboratory.

(Incorrect Responses)

"a" is not correct because a context evaluation fundamentally is concerned with student needs and not one particular response, such as a language laboratory.

"b" is incorrect because input evaluation assesses alternative procedural designs for serving given objectives, input evaluations do not assess the ongoing operation of a chosen procedural design.

"d" is not correct because product evaluations monitor results not procedures.

Question 14.

Given the following situation: A curriculum committee wishes to determine whether a special tutorial project is aiding as intended in the reduction of the school's dropout rate. Select the most appropriate type of evaluation.

a. Context evaluation

b. Input evaluation

c. Process evaluation

d. Product evaluation

Key to Question 14.

(Correct Response)

You should have responded "d"

Product evaluations describe and judge project outcomes.

Thus, determining whether a tutorial project is aiding in reducing a school's dropout problem calls for a product evaluation.

(Incorrect Responses)

"a" is incorrect because context evaluations focus on system needs, problems and opportunities as opposed to the attainments of special projects.

"b" is not correct because input evaluations assess procedural plans as opposed to project results.

"c" is incorrect because process evaluations assess whether designs are being implemented as opposed to what results are being achieved.

Question 15.

A school curriculum committee identifies and assesses the relative merits of several available curricula for high school physics. What type of evaluation is involved?

a. Context evaluation

b. Input evaluation

c. Process evaluation

d. Product evaluation

Key for Question 15.

(Correct Response)

You should have responded "b"

Input evaluations identify and assess the relative merits of competing strategies and designs.

Thus, an input evaluation would be involved in identifying and assessing alternative curricula for high school physics.

(Incorrect Responses)

"a" is not correct because context evaluations assess system needs, problems, and opportunities as opposed to assessing alternative strategies and designs for responding to targeted needs, problems, and opportunities.

"c" is incorrect because process evaluation describes and judges the implementation of a given design as opposed to assisting in its initial selection.

"d" is incorrect because product evaluation does not assist in choosing a procedural design, but assesses its results once it has been chosen and implemented.

Question 16.

The two uses of the CIPP Model are (1) for decision making and (2) for accountability. Which of the following statements illustrates its use for accountability?

a. The model provides information on the needs, problems, and opportunities of a system from which goals and objectives can be derived.

b. The model provides a record of the objectives chosen and the bases for their choice.

c. The model provides information on whether to terminate, continue, or modify a program.

d. The model provides for the monitoring to project activities so the program can be improved as it is implemented.

Key for Question 16.

(Correct Response)

You should have responded "b"

Accountability is the ability to describe and defend past decisions and actions.

Hence, providing a record of what objectives were chosen, which were rejected and why is a use of context evaluation to serve accountability.

(Incorrect Responses)

"a" is incorrect because it denotes not an instance of accountability but a use of context evaluation to assist in choosing objectives.

"c" is incorrect because it denotes a use of product evaluation to serve a recycling decision as opposed to serving an accountability need.

"d" is not correct because it denotes a use of process evaluation to assist in implementing a design instead of to assist in retrospectively describing and judging the completed process.

Exercise 1.

The CIPP conceptualization of evaluation identified four types of evaluation and four types of decisions. Below is a brief description of a hypothetical project. Analyze this example to identify what instances of context, input, process, and product evaluation are involved in supporting instances of planning, structuring, implementing, and recycling decisions. Record your answers on the following response sheets.

> A school district obtained funds to upgrade the teaching of instrumental music for disadvantaged children.
>
> It had been ascertained that poor children rarely received opportunities to develop their musical interests and abilities. This led to a decision to improve the music education opportunities available to these children. Further assessment revealed that the district was especially weak in the area of instrumental music offerings, so the district officials decided to concentrate on improving their instrumental music offerings for disadvantaged students.
>
> A decision making committee was formed and charged to develop a proposal for external funding of an instrumental music project. They identified (and employed external consultants to judge) several possible strategies for improving the district's instrumental music offerings for the disadvantaged. Finally they decided (and got funds for) a plan to buy musical instruments for use by poor children, to employ five new instrumental music teachers, and institute a volunteer program for talented musicians in the community to assist in the program.
>
> In carrying through the program, it was decided that only four new music teachers would be hired, and that the additional money would be used to buy more instruments. This decision was served by evaluation that indicated that four new teachers would handle the teaching but that insufficient money was available to buy all the needed instruments.
>
> At the end of the project, evaluation indicated that the project had effectively served the instrumental music needs of disadvantaged children. The district board therefore appropriated regular funds to institutionalize the project.

Key for Exercise 1.

Responses to Exercise 1 should include the following:

a. Context evaluation was involved in determining that poor children rarely received opportunities to develop their musical interests and abilities. More context evaluation was involved in discovering that the district was especially weak in the area of instrumental music offerings.

b. Planning decisions were involved first in deciding to improve music education opportunities available to poor children and second in deciding to concentrate on improving the instrumental music offerings.

c. Input evaluation was involved in identifying and assessing several possible strategies for improving the district's instrumental music offerings for the disadvantaged.

d. Structuring decisions were those that determined that instruments would be purchased, five teachers would be hired, a volunteer program would be instituted, and sufficient funds would be provided to carry out these activities.

e. Process evaluation was involved in determining that four instead of five new teachers could carry out the project and that more money than originally allocated was needed to purchase instruments.

f. Implementing decisions were involved in deciding that only four new music teachers would be hired, and that the savings would be used to buy more instruments.

g. Product evaluation indicated that the project had effectively served the instrumental music needs of disadvantaged children.

h. A recycling decision was involved in the board's decision to appropriate regular funds for institutionalizing the project.

Exercise 2.

Assume that you direct an evaluation service agency which conducts evaluations based on the CIPP Model. Develop a brief evaluation proposal in response to the following letter.

Jack and Jaqueline Justice Family Foundation
112 12th Street
Waverly, Iowa

Dear Mr. McJudge:

Presently, Justice Family Foundation is implementing a three-phased program to assist private or independent colleges in our region. The program primarily attempts to assist colleges in the field of improving their enrollment and retention rate, the efficiency of the teaching-learning process, and the exploitation of an unfamiliar area to most colleges at this time deferred giving. It is assumed that the Foundation will designate several million dollars to participant colleges to apply some of the innovative programs to their own situations for the specific reasons of increasing college revenue, decreasing the rate of expenditure, increasing and maintaining the quality of the educational product.

Given this brief summary of the Foundations' program, I would like to indicate to you that we are deeply interested in developing an evaluation program that will tell us, rather precisely, how effective our grants have been. If you feel that your center could be of some service, I would encourage you to explain your ideas and outline a specific proposal to the Foundation as to how you might tackle this very challenging problem-opportunity.

Key for Exercise 2:

Responses to exercise 2 should present and develop the following points:

a. The approach we recommend serves both decision making and accountability.

b. The approach called CIPP includes four kinds of evaluation.

c. The CIPP model should be described.

d. Illustrations should be provided concerning how the CIPP Model applies to the request for assistance.

e. Specific suggestions should be given concerning how your service agency would respond to the request for service.

CHAPTER VII

IMPLEMENTATION OF NEW ROCHELLE EVALUATION MODEL

During April of 1974, school districts throughout New York State were informed of amendments to the Regulations of the Commissioner of Education as well as changes in financial apportionment provisions of Chapter 241. These changes were effective August 26, 1974.

Chapter 241 of the Laws of 1974 of New York State provides for aid to elementary and secondary education for 1974-75. This legislation contains departures from previous aid legislation which has significant impact on the activities of local school districts. Among the most notable departures included is one which provides for additional weighting of aid for pupils with special education needs. These are pupils who have scored on the most recent approved achievement test two grade levels or more below the norm for the grade level in which such pupils are enrolled, in reading or mathematics, or, with respect to pupils in grades two and below, whose most recent acceptable readiness or other test scores predict a serious deficiency in reading or mathematics by the time such pupils have entered grade three.

The regulations of the Commissioner of Education indicated that each school district which receives an apportionment for pupils with special educational needs shall continue and/or develop educationally advantageous programs. These instructional programs should include:

1. Specific pupil learning objectives to provide significant improvement of pupil educational deficiencies;

2. Activities and services which are clearly designed to achieve pupil learning objectives in an efficient manner;

3. Expenditures which are directly related to such activities and services.

Each school district that received an additional apportionment of state aid for pupils with special educational needs was required to prepare and submit to the Commissioner acceptable plans describing the use of such apportionment. Such district plan was required to have an evaluation including, but not limited to, the following:

a. number and grade span of pupils served by planned activities;
b. priority needs, and the method by which such needs were identified;
c. program objectives;
d. descriptions of program activities; and
e. the method to evaluate the extent to which the objectives of the programs have been achieved.

The Superintendent of Schools and his Cabinet saw this as an opportunity to implement the New Rochelle Evaluation Model we had developed. We did so in the following sequence:

Step 1 - Appoint District Evaluation Team to this program.

Evaluation Team

Name	Title
*Seymour Samuels	Director of Pupil Personnel Services
Richard Olcott	Asst. Supt., Instruction
LaRuth Gray	Dept. Chairman - English
Dr. Laura Harkum	District Evaluator - Research
Joseph Isidori	Coordinator - Language Development
Ruth Geldon	Administrator - Funded Programs

*Leader

Step 2 - Inform District Evaluation Team of needed evaluation of programs and services for pupils with special needs.

Step 3 - Outline Duties of District Evaluation Team

- a. Provide overall guidance for the evaluation including operations, direction, information, materials, data processing, statistical analysis and personnel.
- b. Provide guidance and support to the Program Staff in their role of receiving and providing useful information for making decisions.
- c. Identify decision points in the entire evaluation process.
- d. Establish and maintain an apparatus whereby staff may formulate standards (what is expected).
- e. Insure the adequacy of standards.
- f. Communicate statement of standards to staff.
- g. Design a method of obtaining program-performance information.
- h. Report standards vs. discrepancy.
- i. Identify decision points in the problem solving process.
- j. Locate information as to cause of program deficiency.
- k. Identify decision points in choosing criteria to be used for selecting possible and best corrective alternatives.
- l. Locate and synthesize information as requested.

Step 4 - District Evaluation Team in conjunction with Superintendent and Assistant Superintendent for Instruction choose Program Staff.

Step 5 - Appoint Program Staff

Name	Title	District-Wide Service
J. Quick	Principal	Math Elementary
J. Pozzi	Principal	Language Arts Elementary
R. Byrnes*	Principal	District-Wide Service
L. Lyman	Principal	Alternative Programs
I. Konoshima	Principal	Secondary Curriculum
H. Grossman	Dept. Chairman	Math
Dr. S. Warshaw	Psychologist	Special Programs
N. Philips	Teacher	Math
R. Jacobs	Teacher	Language Arts

*Leader

Step 6 - Outline Duties of Program Staff

a. Identify standards.

b. Find ways in which to work with staff to reformulate standards if necessary.

c. Find ways to resolve differences.

d. Identify information available or attainable in order to compare actual performance with what is expected (standard).

e. Provide to Evaluation Staff information descriptive of program performance.

f. Choose between alternatives when there are discrepancies between performance and standards.

g. Follow through to implement alternatives.

h. Maintain liaison with evaluation staff to receive and provide useful information necessary for decision making.

Step 7 - A meeting was held with the Program Staff and the District Evaluation Team in order to determine the scope and areas of evaluation necessary. The information available indicated that the proposed evaluation should be both micro- and macro-analytic. Through other channels, information was either not available or not in a retrievable form to assist in decision-making regarding programs for pupils with special needs.

Step 8 - The Evaluation Team and Program Staff predicted the decisions that would have to be made. The decisions to be made were further delineated through proposed questions.

a. Planning Decisions

1) How well are we doing in our programs for pupils with special needs?

2) What problems exist?

3) What unmet needs exist for these pupils?

4) What improvement-oriented objectives should be developed to meet identified needs?

5) What objectives will receive support of the school and community?

6) Which objectives are most feasible to achieve?

b. Structuring Decisions

1) Can we modify existing programs for pupils with special needs?

2) What alternative programs could we use?

3) What programs are feasible and likely to succeed?

4) How should they be organized and staffed?

5) What programs already exist with relevance for meeting previously established objectives?

6) What programs should be selected?

c. Implementing Decisions

1) Is anything going wrong in programs for pupils with special needs?
2) Are the programs on schedule?
3) Does the staff need training?
4) Are the facilities and materials being used adequately and appropriately?
5) What major procedural barriers need to be overcome in the operation of the present programs?

d. Recycling Decisions

1) How well will our programs for pupils with special needs work?
2) Are our objectives being achieved?
3) To what extent were the needs of pupils with special needs met as a result of our efforts and programs?
4) Should we continue, modify, or drop a program?

Step 9 - In order to answer these questions and judge decision alternatives, the four types of evaluation (CIPP) were outlined. Information requirements and activities were developed.

Decision	Evaluation	Information Requirements - Activities
Planning	Context	Analysis of existing objectives, scores, staff and community concerns. Discrepancy between system goals and system performance. Diagnoses of problems which account for discrepancy. Meetings, surveys, system analysis, school profile, review of literature, and consultants.

Decision	Evaluation	Information Requirements - Activities
Structuring	Input	Analysis of existing programs and resources. Identification of successful outside programs and materials. Information from literature on strengths and weaknesses of programs. Statements from experts. Comparative cost data. Evaluation and Program Staff judgment, and visitations to other programs.
Implementing	Process	Discrepancy evaluation by Evaluation and Program Staff re: staff support, conflicts in organization, budgets, schedules, strengths and weaknesses of materials, misunderstanding of purposes, training for personnel. Reports, observation and judgment of Evaluation and Program Staff.
Recycling	Product	Performance in relation to expected outcomes and objectives. Cost and benefit of program activities. Inference about the causal relationship between program and results. Successes of students with special needs - Pre- Post-test Iowa Test of Basic Skills.

This evaluation will serve both proactive support for decision making and retroactive support for accountability.

	Context	Input	Process	Product
Decision Making	Objectives	Solution strategy Procedural design	Implementation	Termination Continuation Modification Installation
Accountability	Record of objectives and bases for their choice	Record of strategy and design and reasons for their choice	Record of the actual process	Record of attainments and recycling decisions

The following matrix serves to summarize the evaluation of programs and activities for pupils with special needs.

Data Requirements for Accountability	Evaluation Types			
	Context	Input	Process	Product
What objectives were chosen?	X			
Why?	X			
Were they adopted		X	X	
Were they achieved?				X
What designs were chosen?		X		
Why?	X	X		
Were they implemented?			X	
What were their effects?				X

Step 10 - Forms were developed to delineate and obtain information. These include the School Profile, testing program and others. Samples are in the appendix.

Step 11 - The foregoing ten (10) steps serve as the process whereby the New Rochelle Evaluation Model was implemented to delineate, obtain, and provide useful information for judging decision alternatives regarding programs for pupils with special needs. It is expected that this evaluation plan is both formative and summative. The process will continue during the 1974-75 school year.

The same procedures used to implement the New Rochelle Evaluation Model, in the evaluation of district-wide programs for students with special needs, was followed in the evaluation of two programs at the building level.

Hillcrest Elementary School - Spring Valley

The staff of the Hillcrest Elementary School was provided with in-service training in the philosophy and methods of the New Rochelle Evaluation Model.

The traditional organizational structure of the school was redesigned to include an Evaluation Team and a Program Staff Team, as in Figure 18 (see page 156).

The need for evaluation originated with the teaching staff. The teachers voiced concern about needed decisions regarding the school's K-6 reading program. The teachers needed more information on (a) the difficulty of the materials as they related to the abilities of the students; (b) the reasons for the decline of New York State reading scores; (c) the reasons for the discrepancy between math and reading scores; and (d) discrepancy between actual reading performance and expected performance. Requirements and objectives have been given to both the Evaluation and Program Staff. A calendar of activities has been developed for the completion of the evaluation during the 1974-75 school year.

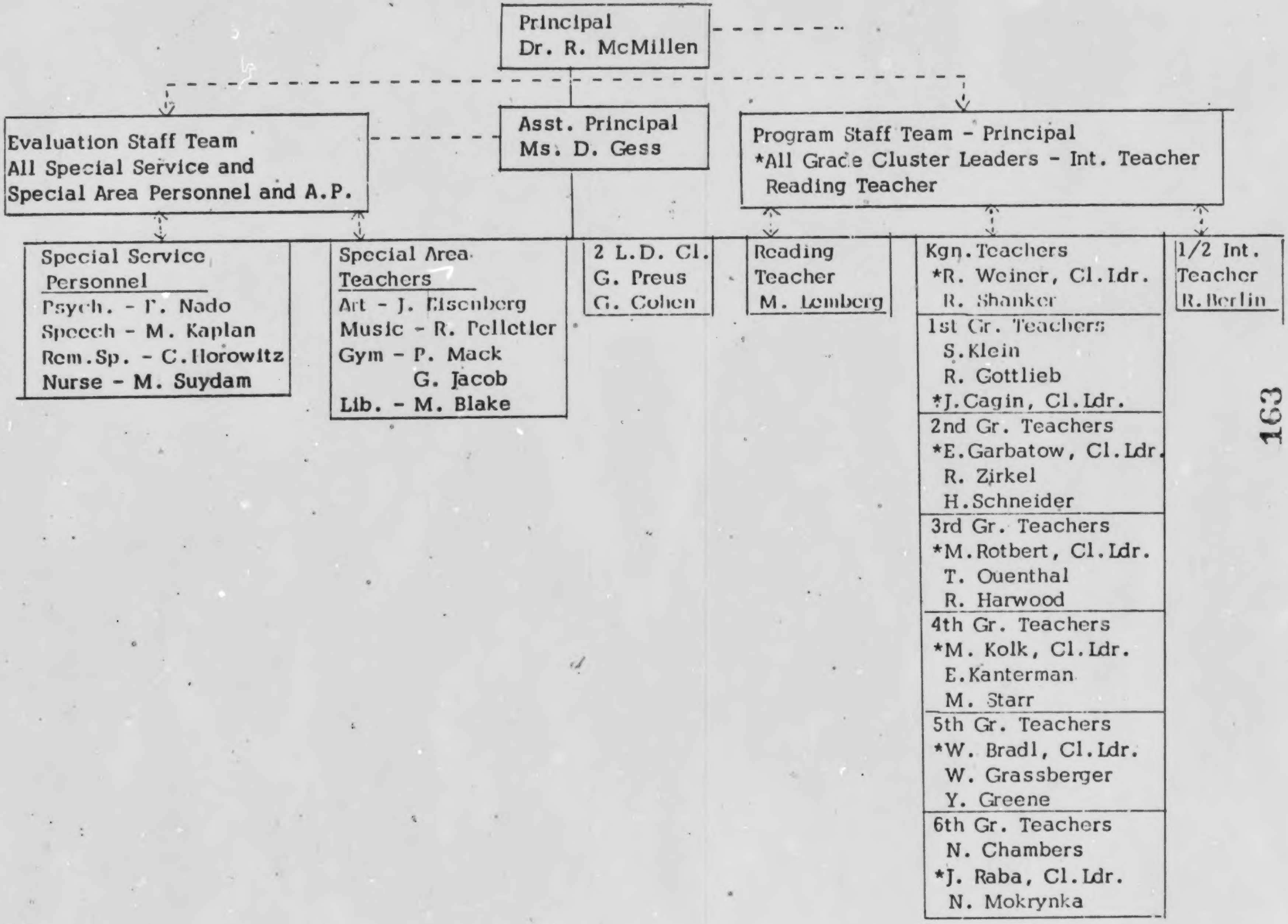
Pennington Elementary School - Mount Vernon

The staff of the Pennington Elementary School was provided with in-service training in the philosophy and methods of the New Rochelle Evaluation Model. The traditional role of staff in the school was expanded to include staff that would serve as the Pennington School Evaluation Team and Program Staff.

The need for evaluation originated with the grade teachers and the remedial reading teacher. Both had expressed dissatisfaction with the presently used Ginn 360 Primary Basal Reading Program. Decisions had to be made regarding the continuation, modification or replacement of this program. It was realized that there was not enough useful information to assist in appropriate decisions. Preliminary discussion also indicated that little was known of why this program was chosen and what needs it hoped to meet. Teachers indicated that they were

Figure 18.

HILLCREST ELEMENTARY SCHOOL
ORGANIZATIONAL CHART
June 1974


Principal
Dr. R. McMillen
Asst. Principal
Ms. D. Gess
Evaluation Staff Team
All Special Service and
Special Area Personnel and A.P.
Program Staff Team - Principal
*All Grade Cluster Leaders - Int. Teacher
Reading Teacher
Special Service
Personnel
Psych. - P. Nado
Speech - M. Kaplan
Rem.Sp. - C.Horowitz
Nurse - M. Suydam
Special Area
Teachers
Art - J. Eisenberg
Music - R. Pelletier
Gym - P. Mack
G. Jacob
Lib. - M. Blake
2 L.D. Cl.
G. Preus
G. Cohen
Reading
Teacher
M. Lemberg
Kgn. Teachers
*R. Weiner, Cl.Ldr.
R. Shanker
1st Gr. Teachers
S.Klein
R. Gottlieb
*J.Cagin, Cl.Ldr.
2nd Gr. Teachers
*E.Garbatow, Cl.Ldr.
R. Zirkel
H.Schneider
3rd Gr. Teachers
*M.Rotbert, Cl.Ldr.
T. Ouenthal
R. Harwood
4th Gr. Teachers
*M. Kolk, Cl.Ldr.
E.Kanterman
M. Starr
5th Gr. Teachers
*W. Bradl, Cl.Ldr.
W. Grassberger
Y. Greene
6th Gr. Teachers
N. Chambers
*J. Raba, Cl.Ldr.
N. Mokrynka
1/2 Int.
Teacher
R.Berlin

going to switch to the Keys to Reading Program prior to the in-service program on evaluation. During the in-service program the staff indicated their desire for a complete evaluation, using the New Rochelle Model, in order to judge decision alternatives.

The Program Staff appointed included: two first grade teachers, school nurse, remedial reading teacher, and a parent volunteer.

The Evaluation Team appointed included Assistant Superintendent for Instruction, Director of Reading, Title I Administrator, and the school psychologist.

Requirements and objectives have been designed for both Program Staff and Evaluation Team A calendar of activities has been developed for the completion of the evaluation during the 1974-75 school year.

SUMMARY

The New Rochelle Evaluation Model has been implemented on a district-wide level in the City School District of New Rochelle, and on a building level in the Hillcrest Elementary School, Spring Valley, and the Pennington Elementary School, Mount Vernon. The district-wide evaluation focused on all programs for students with special needs, while the building level evaluation focused on reading programs. The formative and summative evaluations will be completed during the 1974-75 school year. All three evaluations should provide data (information) in order to answer the following questions.

1. What objectives were chosen? Why? Were they adopted? Were they achieved?

2. What designs were chosen? Why? Were they implemented? What were their effects?

This information will assist in more effective educational decisions.

CHAPTER VIII

EVALUATION OF PRACTICUM

The evaluation of this practicum was based on the ability of significant school district staff to perceive whether or not the practicum participants were able to complete successfully the activities that were necessary to implement the New Rochelle Evaluation Model.

A behavioral questionnaire was developed and distributed to significant staff. The results of this questionnaire are on the following pages. Although there are some slight differences in perceptions of the degree of implementation, there was consistency in the perceptions that the practicum participants completed the activities necessary to develop and implement our evaluation model.

EVALUATION REPORT

Implementation of a District-Wide Evaluation Model

Please indicate the degree to which the New Rochelle Nova Practicum Participants carried out the tasks or activities they proposed. Your indications should be determined thru interface contact as well as your reading of their papers and participation in their training sessions.

Activity	Degree of Implementation		
	Very Observable	Moderately Observable	Not Observable
Determined need for Evaluation Model	✓		
Investigated Evaluation Models	✓		
Described Evaluation Models	✓		
Critically examined the Models		✓	
Developed a workable Model		✓	
Developed Training Materials		✓	
Provided In-service Training		✓	
Developed New Organizational Structure	✓		
Developed New Role Descriptions	✓		
Developed Guide Book	✓		
Implemented the Model		✓	

Robert R Spillane
(Signed)

Supt of Schools
(Title)

EVALUATION REPORT

Implementation of a District-Wide Evaluation Model

Please indicate the degree to which the New Rochelle Nova Practicum Participants carried out the tasks or activities they proposed. Your indications should be determined thru interface contact as well as your reading of their papers and participation in their training sessions.

Activity	Degree of Implementation		
	Very Observable	Moderately Observable	Not Observable
Determined need for Evaluation Model	X		
Investigated Evaluation Models	X		
Described Evaluation Models	X		
Critically examined the Models		X	
Developed a workable Model	X		
Developed Training Materials		X	
Provided In-service Training	X		
Developed New Organizational Structure	X		
Developed New Role Descriptions	X		
Developed Guide Book	X		
Implemented the Model	X		

Leonard B. [illegible]
(Signed)
Asst to Supt of Schools
(Title)
New Rochelle, N.Y.

EVALUATION REPORT

Implementation of a District-Wide Evaluation Model

Please indicate the degree to which the New Rochelle Nova Practicum Participants carried out the tasks or activities they proposed. Your indications should be determined thru interface contact as well as your reading of their papers and participation in their training sessions.

Activity	Degree of Implementation		
	Very Observable	Moderately Observable	Not Observable
Determined need for Evaluation Model	X		
Investigated Evaluation Models		X	
Described Evaluation Models	X		
Critically examined the Models		X	
Developed a workable Model	X		
Developed Training Materials	X		
Provided In-service Training	X		
Developed New Organizational Structure	X		
Developed New Role Descriptions	X		
Developed Guide Book	X		
Implemented the Model	X		

Bernard J. Forman
(Signed)

Principal
(Title)

EVALUATION REPORT

Implementation of a District-Wide Evaluation Model

Please indicate the degree to which the New Rochelle Nova Practicum Participants carried out the tasks or activities they proposed. Your indications should be determined thru interface contact as well as your reading of their papers and participation in their training sessions.

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Investigated Evaluation Models	✓		
Described Evaluation Models	✓		
Critically examined the Models	✓		
Developed a workable Model	✓		
Developed Training Materials	✓		
Provided In-service Training		✓	
Developed New Organizational Structure	✓		
Developed New Role Descriptions	✓		
Developed Guide Book	✓		
Implemented the Model	✓		

Isaac Konoshima
(Signed)

Principal - JEY
(Title)
J.T.S.

EVALUATION REPORT

Implementation of a District-Wide Evaluation Model

Please indicate the degree to which the New Rochelle Nova Practicum Participants carried out the tasks or activities they proposed. Your indications should be determined thru interface contact as well as your reading of their papers and participation in their training sessions.

Activity	Degree of Implementation		
	Very Observable	Moderately Observable	Not Observable
Determined need for Evaluation Model	X		
Investigated Evaluation Models		X	
Described Evaluation Models	X		
Critically examined the Models		X	
Developed a workable Model	X		
Developed Training Materials	X		
Provided In-service Training	X		
Developed New Organizational Structure	X		
Developed New Role Descriptions		X	
Developed Guide Book	X		
Implemented the Model	X		

Caroline B. Byrnes
(Signed)

Principal District Services
(Title)

EVALUATION REPORT

Implementation of a District-Wide Evaluation Model

Please indicate the degree to which the New Rochelle Nova Practicum Participants carried out the tasks or activities they proposed. Your indications should be determined thru interface contact as well as your reading of their papers and participation in their training sessions.

Activity	Degree of Implementation		
	Very Observable	Moderately Observable	Not Observable
Determined need for Evaluation Model	✓		
Investigated Evaluation Models	✓		
Described Evaluation Models	✓		
Critically examined the Models	✓		
Developed a workable Model	✓		
Developed Training Materials	✓		
Provided In-service Training	✓		
Developed New Organizational Structure		✓	
Developed New Role Descriptions	✓		
Developed Guide Book	✓		
Implemented the Model	✓		

Alta C. Meeks
(Signed)

Key Counselor / A. E. Young Jr. Hi.
(Title)

EVALUATION REPORT

Implementation of a District-Wide Evaluation Model

Please indicate the degree to which the New Rochelle Nova Practicum Participants carried out the tasks or activities they proposed. Your indications should be determined thru interface contact as well as your reading of their papers and participation in their training sessions.

Activity	Degree of Implementation		
	Very Observable	Moderately Observable	Not Observable
Determined need for Evaluation Model	✓		
Investigated Evaluation Models	✓		
Described Evaluation Models	✓		
Critically examined the Models			
Developed a workable Model		✓	
Developed Training Materials		✓	
Provided In-service Training		✓	
Developed New Organizational Structure	✓		
Developed New Role Descriptions	✓		
Developed Guide Book	✓		
Implemented the Model		✓	

Gerald Lauber
(Signed)

Principal
(Title)

Traphagen School
Mt Vernon N.Y.

EVALUATION REPORT

Implementation of a District-Wide Evaluation Model

Please indicate the degree to which the New Rochelle Nova Practicum Participants carried out the tasks or activities they proposed. Your indications should be determined thru interface contact as well as your reading of their papers and participation in their training sessions.

Activity	Degree of Implementation		
	Very Observable	Moderately Observable	Not Observable
Determined need for Evaluation Model	✓		
Investigated Evaluation Models		✓	
Described Evaluation Models	✓		
Critically examined the Models		✓	
Developed a workable Model	✓		
Developed Training Materials	✓		
Provided In-service Training	✓		
Developed New Organizational Structure	✓		
Developed New Role Descriptions	✓		
Developed Guide Book	✓		
Implemented the Model	✓		

R L McMullen
(Signed)

Principal - Hillcrest Elem. School
(Title)

EVALUATION REPORT

Implementation of a District-Wide Evaluation Model

Please indicate the degree to which the New Rochelle Nova Practicum Participants carried out the tasks or activities they proposed. Your indications should be determined thru interface contact as well as your reading of their papers and participation in their training sessions.

Activity	Degree of Implementation		
	Very Observable	Moderately Observable	Not Observable
Determined need for Evaluation Model	X		
Investigated Evaluation Models		X	
Described Evaluation Models	X		
Critically examined the Models	X		
Developed a workable Model	X		
Developed Training Materials		X	
Provided In-service Training	X		
Developed New Organizational Structure	X		
Developed New Role Descriptions		X	
Developed Guide Book	X		
Implemented the Model	X		

Ronald Roberto
(Signed)

Director, ESAA Coordinator
(Title)

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APPENDIX A

THE NEW ROCHELLE SCHOOL PROFILE III

BOARD · OF · EDUCATION
NEW · ROCHELLE · NEW · YORK
1857

THE NEW ROCHELLE SCHOOL PROFILE

III

A Report of the New Rochelle Public Schools to the Community
Spring, 1973

Prepared by the Professional Staff
of
The City School District of New Rochelle
ROBERT R. SPILLANE, Ph.D.
Superintendent of Schools

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APPENDIX B

LIST OF OVERHEADS IN ORDER OF PRESENTATION

Appendix B

LIST OF OVERHEADS IN ORDER OF PRESENTATION

1. Rationale for Evaluation
2. Methodology of Evaluation
3. Developing Evaluation Designs
4. Definition of Evaluation
5. The Relationship of Evaluation to Decision Making
6. Decision Making as a Basis for Evaluation
7. Decision Making Functions
8. Symbiotic Relationship
9. Evaluation Services Decision Making
10. Evaluation and Decision Types
11. Evaluation Types and Operations
12. A Detailed Evaluation Model
13. The CIPP Evaluation Model
14. Context Evaluation
15. Input Evaluation
16. Process Evaluation
17. Product Evaluation
18. Evaluation Types and Accountability
19. Interface Methodologies with Decision Makers and/or Audiences
20. Interfaces of Evaluators with Decision Makers and/or Audiences
21. Work Breakdown for Delineating Information
22. Planning Chart for Collection of Descriptive Data

23. Tasks for Statement of Evaluation Assumptions

24. Tasks for Statement of Evaluation Policies

25. Tasks for Specification of Decisions

26. Tasks for Analysis of Data

27. Tasks for the Organization of Data

28. Tasks for Preparation of Reports

29. Media Suggestions for Use in Reporting Evaluation Results

30. Members of a Model Evaluation Unit

31. Organization of Evaluation Units

32. Criteria for Assessing Evaluation

APPENDIX C

SAMPLE FORMS FOR DATA COLLECTION

CITY SCHOOL DISTRICT
City of New Rochelle, New York
515 North Avenue • New Rochelle 10801
Telephone—all schools and offices NE 2-9000

Pupil Personnel Services
Seymour Samuels, Director

June 16, 1974

TO: All Principals

FROM: Center for Educational Evaluation and Development

RE: District Plan

In accordance with the new State Aid formula, the New York State Department of Education has mandated that all school districts submit a District Plan which will enable students with special educational needs to qualify for additional aid monies. "Students classified as having special educational needs are those pupils who have scored on their most recent acceptable test at least two grade levels below the norm in reading or in mathematics, except in the case of pupils in grades 2 and below who shall be eligible for such supplementary programs on the basis of their most recent acceptable readiness or other test scores which predict serious deficiency in reading or in mathematics by the time such pupils shall have reached grade 3."

The purpose of this survey is to assist you and the district in determining priority pupil needs and program activities to meet these needs.

According to the New York State P.E.P. results for the last two years, it is estimated that approximately the following percentage at each grade level in your school have special educational needs.

School	Reading	Math
Webster	30%	37%

Please outline the instructional strategies being used to meet these needs:

CITY SCHOOL DISTRICT OF NEW ROCHELLE
CENTER FOR EDUCATIONAL EVALUATION AND DEVELOPMENT

PROGRAM FOR STUDENTS WITH SPECIAL NEEDS

This instrument* is designed to help assess the adequacy of a program.

This is a checklist against which the administrator may hold his program for comparison. Following the checklist is a further list of questions. This section also includes a list of questions that help determine program compatibility.

		Yes	No
1.	Staff qualifications are sufficient for performing staff functions and duties.	_____	_____
2.	Staff duties are clearly related to staff functions.	_____	_____
3.	The administrative support is sufficient for program operation.	_____	_____
4.	Media are related to and sufficient for student activities.	_____	_____
5.	Facilities are adequate for program operation.	_____	_____
6.	The time allotted for program operation is sufficient to accomplish program goals.	_____	_____
7.	Student activities are related to student goals.	_____	_____
8.	Staff activities are related to student goals.	_____	_____
9.	A process is defined that is sufficient to change each input into the output.	_____	_____
10.	Communication activities within the program and between the program staff and others are sufficient to support operation.	_____	_____

*Adapted from Malcom Provus' DEM

Questions:

1. Do the objectives tell what the student does to signify success in the program?
2. Are the objectives clearly related to day-to-day activities of the program?
3. Are the entering behaviors consistent with the selection criteria of the participants?
4. Are the entering behaviors linked to the program's objectives?
5. Are the media clearly related to activities? Are they sufficient for the essential activities?
6. Are the activities related to the objectives? Is there at least one activity for each objective?
7. Are time resources realistically related to the objectives? Is there sufficient time for each specified activity?
8. Are staff qualifications and characteristics adequate for the functions defined? If not, are inservice activities spelled out to make them adequate?
9. Are all functions necessary to serve the objectives included?
10. Are the functions for each group clearly related to program objectives?
11. Are the staff duties clearly related to staff functions?
12. Are staff duties clearly defined?
13. Are there duties for each function?
14. Are intrastaff activities adequate for support of program operations? for support of program objectives?
15. Are communication channels outside the program related to support needs?

CITY SCHOOL DISTRICT OF NEW ROCHELLE
CENTER FOR EDUCATIONAL EVALUATION AND DEVELOPMENT

TEACHER PROGRESS REPORT

Name of Teacher______________________________ School____________________

Date______________________

Please answer each of the following questions to the best of your ability and on the basis of your own personal experience.

1. Has a new practice aimed at coping with problems of students with special needs now been adopted in your school?

   Yes_______ No_______

2. Are you aware of any noticeable benefit to you or your colleagues derived from the program adopted?

   Yes_______ No_______

3. Are there any discernible benefits to students? Yes_____ No_____

4. Are there any discernible benefits to administrators? Yes_____ No_____

5. Has it been necessary to change the program originally adopted? Yes_____ No_____

   If yes, please explain:

6. Would you like to see an immediate change in the program now being used? Yes_____ No_____

   If yes, what change would you suggest and why?

7. Do you anticipate that the program will remain in effect as originally intended for the coming month? Yes_____ No_____

   If no, please explain:

8. Please make any other comments you feel are relevant to the success of the program.

CITY SCHOOL DISTRICT OF NEW ROCHELLE
CENTER FOR EDUCATIONAL EVALUATION AND DEVELOPMENT

List the in-service staff development activities conducted in your school district in preparation for programs for students with special needs. Please list each training topic, the number of personnel trained in each topic and the number of training hours devoted to each topic.

TITLE OF TOPIC	Number of Personnel Trained	Number of Training Hours

CITY SCHOOL DISTRICT OF NEW ROCHELLE
CENTER FOR EDUCATIONAL EVALUATION AND DEVELOPMENT

Students with Special Needs (Secondary School Principal)

The District Evaluation Team is currently engaged in an evaluation project to determine the advantages and disadvantages of the implementation of the Special Needs Program. This school year _____% of your students are students with special needs. In order to discover the actual benefits and problems associated with your program, a wide variety of information other than standardized test scores must be collected.

1. Were changes in type and/or quantity of instructional materials required to implement programs for these students? Yes_____ No_____

   If your answer is yes, check these items affected:

   _____textbooks _____desks _____simulation goals

   _____audio-visual equipment _____work books _____training packages

   _____research materials _____instructional guides

   _____library materials

2. Was rescheduling of course necessary? Yes_____ No_____

   How difficult was rescheduling with the addition of Special Programs compared to scheduling courses prior to:
   Less_____
   Same_____
   More_____
   Much more_____

3. If your staff participated in staff development preparatory prior to implementation of the program, how do you rate the value of the in-service staff development? (rate on an increasing scale going from "no value" to "great value." 1 2 3 4 5 6

4. What patterns of time were made available for staff to modify instructional patterns for students?

Principals

List the in-service staff development activities conducted in your building in preparation for the Special Needs Program fn the last 3 years. Please list each training topic; (the number of personnel trained, the number of training hours, and the trainer.)

Title of Topic	Number of Personnel Trained	Number of Hours	Trainer

Interview Guide (Random sample)

Counselor/____________________________

Q. What has been the teacher's reaction to the Special Needs Program?

How have pupils reacted?

How have parents reacted?

CITY SCHOOL DISTRICT OF NEW ROCHELLE
CENTER FOR EDUCATIONAL EVALUATION AND DEVELOPMENT

Subject Area:________________________

Date of completion of list of objectives, items, and expected student performance:

____

Objectives	Items	Expected Student Performance	Actual Student Performance	Date of Measurement	Interpretation

CITY SCHOOL DISTRICT OF NEW ROCHELLE
CENTER FOR EDUCATIONAL EVALUATION AND DEVELOPMENT

SPECIAL NEED: ATTITUDE TOWARD LEARNING PROCESSES (Elementary)

CHECK: ( )BOY ( )GIRL Grade____________

We would like to know how you feel about how you learn in school. Blacken in the circle with a pencil to show how you feel. Fill in only one circle for each question. YOUR TEACHER WILL NOT SEE THIS. Have fun!

1. We get enough time to help each other in class........................	NO ○	SOMETIMES ○	USUALLY ○	YES ○
2. I have to spend too much time sitting at my desk........................	NO ○	SOMETIMES ○	USUALLY ○	YES ○
3. Everybody has to work on the same thing at the same time..............	NO ○	SOMETIMES ○	USUALLY ○	YES ○
4. We get enough chances to choose the kinds of things we want to do in this class......	NO ○	SOMETIMES ○	USUALLY ○	YES ○
5. We have to get permission from teachers to do anything around here...............	NO ○	SOMETIMES ○	USUALLY ○	YES ○
6. We have enough chances to go outside the classroom and outside the school to learn things.........................	NO ○	SOMETIMES ○	USUALLY ○	YES ○
7. If we tell the teacher what we would like to do, she tries to let us do it........	NO ○	SOMETIMES ○	USUALLY ○	YES ○
8. Teachers do too much of the talking in class..............................	NO ○	SOMETIMES ○	USUALLY ○	YES ○
9. We have enough chances to walk around in the classroom.................	NO ○	SOMETIMES ○	USUALLY ○	YES ○

cont....

10. I have enough chances to sit together with my friends in this school........... NO ○ SOMETIMES ○ USUALLY ○ YES ○

11. We spend too much of our class time reading the same books over and over again............................ NO ○ SOMETIMES ○ USUALLY ○ YES ○

12. We have too much homework............ NO ○ SOMETIMES ○ USUALLY ○ YES ○

13. I have enough chances to work with my friends in small groups.............. NO ○ SOMETIMES ○ USUALLY ○ YES ○

14. I have enough chances to work on special things that I really like.......... NO ○ SOMETIMES ○ USUALLY ○ YES ○

15. I have enough chances to work as fast or as slow as I want to................. NO ○ SOMETIMES ○ USUALLY ○ YES ○

APPENDIX D

NEW ROCHELLE EVALUATION MODEL

GUIDE

NEW ROCHELLE EVALUATION MODEL

GUIDE

"Evaluation is to Improve, not to Prove"

Superintendent of Schools
Robert R. Spillane, Ph.D.

District Evaluation Team
Gray, L.; Isidori, J.;
Olcott, R.; Pozzi, J.;
Samuels, S.

Center for Educational Evaluation and Development
City School District of New Rochelle

ACKNOWLEDGMENTS

Appreciation to Dr. Daniel Stufflebeam, Dr. Malcom Provus, Dr. Robert Stake, Dr. Blaine Worthen, and the School District of the City of Saginaw, Michigan for allowing us to alter and excerpt from their materials in the development of this Guide.

We are indebted to the City School District of New Rochelle, its Board of Education, Superintendent of Schools, Administration and Teaching Staff, for recognizing a need and providing the necessary personnel, budget, time and direction in meeting that need.

Additional acknowledgments to the City School Districts of Mount Vernon and Spring Valley for their willingness to participate in a cooperative effort.

A special debt of gratitude to Mr. S. O. Kaylin and Nova University, Fort Lauderdale, Florida, for providing professional contacts, support and direction.

GUIDE
to
INITIATING EVALUATION THROUGH
NEW ROCHELLE EVALUATION MODEL

Introduction

This guide has been prepared to provide the user with a systematic, step by step procedure for implementing desired evaluation. It presents a brief description of what evaluation is as well as the steps necessary in order to carry out evaluation in the City School District of New Rochelle.

More detailed information can be found in the already developed New Rochelle Evaluation Model.

What is Evaluation?

Evaluation is the process of delineating, obtaining and providing useful information for making educational decisions. In line with this definition is the belief that evaluation is to improve rather than to prove.

The process of evaluation depends upon the types of decisions one has to make. The decisions can be categorized into four types:

1. Planning Decisions - These decisions specify the objectives to be achieved in an educational system.
2. Structuring Decisions - These decisions specify the means to achieve the ends which have been established as a result of planning decisions.
3. Implementing Decisions - These decisions involve choices in carrying through the action plan established by structuring decision.

4. Recycling Decisions - These decisions relate to choices in determining whether to continue, terminate, evolve, or drastically modify the activity or program devoted to the solution of a system problem.

Decision Types and Evaluation Types

Each type of decision requires a unique type of evaluation activities.

Planning Decisions - serviced by - Context Evaluation
Structuring Decisions - serviced by - Input Evaluation
Implementing Decisions - serviced by - Process Evaluation
Recycling Decisions - serviced by - Product Evaluation

1. Context Evaluation - This type of evaluation is systematic and macroanalytic. Its purpose is to provide a rationale for the determination of objectives. It defines the environment, describe the desired and actual conditions pertaining to the environment, identifies unmet needs, and diagnoses the problems that prevent needs from being met.
2. Input Evaluation - This type of evaluation is essentially ad hoc and microanalytic. Its purpose is to provide information for determining how to utilize resources to meet program goals. It identifies and assesses relevant capabilities of the responsible individuals or agencies, strategies for achieving program goals, and designs for implementing a selected strategy.
3. Process Evaluation - This type of evaluation provides periodic feedback to persons responsible for implementing plans and procedures. It has three objectives: (1) to detect or predict defects

in the procedural design or its implementation during the implementation stages; (2) to provide information for programmed decisions, and (3) to maintain a record of the procedure as it occurs.

4. Product Evaluation - This type of evaluation measures and interprets attainments at the end of a program cycle. It assesses the extent to which ends are being attained with respect to the change efforts.

CIPP is an acronym formed from the first letters of the four basic kinds of evaluation: Context, Input, Process, Product, developed by Daniel Stufflebeam and incorporated as the basic framework for the New Rochelle Evaluation Model.

Evaluation is

The Process of Delineating, Obtaining and Providing Useful

INFORMATION . . . . . for making . . . . . EDUCATIONAL DECISIONS

Context	Planning
Analysis of existing objectives of programs, scores, staff and community concerns and characteristics, etc.	How well are we doing in our programs? What problems exist? What changes in purposes should be made?
Input	Structuring
Analysis of existing programs and resources, identification of successful outside programs and materials, information from literature on strengths and weaknesses of programs, etc.	Can we modify existing programs? What alternative programs could we use? What programs are feasible and likely to succeed? How should they be organized and staffed? What program would be selected?
Process	Implementing
Staff support, conflicts in organization, tight budgets and schedules, strengths and weaknesses of materials, misunderstanding of purposes, lack of trained personnel.	Is anything going wrong in the program? Staff? Schedule? etc.
Product	Recycling
Performance in relation to expected outcomes and objectives, costs and benefits of different program activities, etc.	How well did our program work? Should we continue, modify, or drop the program?

The New Rochelle Evaluation Model will provide both proactive support for decision making and retroactive support for accountability.

	Context	Input	Process	Product
Decision Making	Objectives	Solution strategy Procedural design	Implementation	Termination Continuation Modification or Installation
Accountability	Record of objectives and bases for their choice	Record of chosen strategy and design and reasons for their choice	Record of the actual process	Record of attainments and recycling decisions

The following matrix, developed by Daniel Stufflebeam, serves to summarize the evaluation model.

Data Requirements for Accountability	Evaluation Types			
	Context	Input	Process	Product
What objectives were chosen?	X			
Why?	X			
Were they adopted?		X	X	
Were they achieved?				X
What designs were chosen?		X		
Why?	X	X		
Were they implemented?			X	
What were their effects?				X

THE ROLE OF ADMINISTRATORS AND TEACHERS

The role of the decision-maker who gathers and weighs information prior to making a choice and taking action applies to all members of the administrative and teaching staff since both function as decision-makers. Principals, teachers, and other designated professional personnel, individually or in cooperation with others, have four broad obligations in the process of evaluation. These obligations deal with focusing on evaluation information to be provided, providing information to members of the evaluation staff, handling evaluation information given to them, and using evaluation information provided to them.

The steps necessary to initiate and complete evaluation include:

1. Staff, through the building principal, shall define a program or programs that require decisions.
2. Staff, through the building principal, will define the necessary decisions for which information will be needed.
3. The principal will identify representative staff that are involved in the program which is in need of evaluation.
4. This appointed staff will be considered and function as the Program Staff Team. Activities of Program Staff Team may include:
    a. Identify standards
    b. Find ways in which to work with staff to reformulate standards if necessary
    c. Find ways to resolve difference
    d. Identify information available or attainable in order to compare actual performance with what is expected (standard)

   e. Provide to Evaluation Staff information descriptive of program performance
   f. Choose between alternatives when there are discrepancies between performance and standard
   g. Follow through to implement alternatives
   h. Maintain liaison with evaluation staff to receive and provide useful information necessary for decision making

5. It is not expected that the program staff team can carry out these activities without support of the district Evaluation Staff Team.
6. The building principal secures the services of the district Evaluation Staff Team by filling out the Evaluation Services Request Form. These forms are in the office of the building principal. A copy of this form is attached to this guide.
7. Any staff member may request such evaluation services; however, requests must be submitted through the building principal.
8. The request for evaluation services should be submitted to the Director of Pupil Personnel Services - Center for Educational Evaluation and Development.
9. The district Evaluation Staff Team will provide the overall guidance for the evaluation including operations, direction, information, materials, data processing, statistical analysis, and personnel.
10. The district Evaluation Staff Team will provide the guidance and support to the Program Staff in their role of receiving and

providing useful information for making decisions.

11. In addition, the following activities may also be performed by the Evaluation Staff Team:
    a. Identify decision points in the entire evaluation process
    b. Establish and maintain an apparatus whereby staff may formulate standards (what is expected)
    c. Insure the adequacy of standards
    d. Communicate statement of standards to staff
    e. Identify information needed to compare performance with standards
    f. Design a method of obtaining program-performance information
    g. Report standards vs. performance discrepancy
    h. Identify decision points in the problem solving process
    i. Locate information as to cause of program-performance deficiency
    j. Identify decision points in chosing criteria to be used for selecting possible and best corrective alternatives
    k. Locate and synthesize information as requested.

DEFINITION

Educational evaluation is the process of delineating, obtaining, and providing useful information for judging decision alternatives.

"Evaluation is to improve, not to prove."

Appendix A

Center for Educational Evaluation and Development
Office of Pupil Personnel Services

EVALUATION SERVICES
REQUEST FORM

Name________________________________ Position__________________________

School________________________________ Activity Title______________________

Date________________________________

Brief Description of Activity (Program):

Evaluation Services Desired - Specific Information Needed:

____
(Principal)

Appendix B

NEW ROCHELLE DISTRICT TESTING SCHEDULE

City School District of New Rochelle
Department of Pupil Personnel Services
Office of Psychological Services

Grade	Administration Date	Type of Test	Name of Test
Kg	Sept. 23-27	Basic Concepts	Boehm Test of Basic Concepts
1	Sept. 23-27	Reading Readiness	Murphy Durrell Reading Readiness
2	Oct. 15-18	Achievement	Iowa Test of Basic Skills, Primary Form 5, Level 7
3	Sep.30-Oct.4 Oct. 15-18	Achievement Achievement	N.Y. State Reading and Arithmetic Iowa Test of Basic Skills, Form 5, Level 8
4	Oct. 15-18 Nov. 11-15	Achievement Ability	Iowa Test of Basic Skills, Form 5, Level 9 Lorge-Thorndike
5	Oct. 15-18	Achievement	Iowa Test of Basic Skills, Form 5, Level 10
6	Sep.30-Oct.4 Oct. 15-18 Nov. 11-15	Achievement Achievement Ability	N.Y. State Reading and Arithmetic Iowa Test of Basic Skills, Form 5, Level 11 Lorge-Thorndike
7	Oct. 15-18	Achievement	Iowa Test of Basic Skills, Form 5, Level 12
8	Oct. 15-18 Dec. 3-6	Achievement Aptitude	Iowa Test of Basic Skills, Form 5, Level 13 Differential Aptitude Test
9	Sep.30-Oct.4 Oct. 15-18	Achievement Achievement	N.Y. State Reading and Arithmetic Iowa Test of Basic Skills, Form 5, Level 14
10	OUT OF SYSTEM TESTING		
11	OUT OF SYSTEM TESTING		
12	OUT OF SYSTEM TESTING		